

# THE NATIONAL WOOL GROWER

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## Lambing Methods In National Forests of Southwest

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THE high price of wool and mutton has greatly increased the sheepmen's interest in lambs—the raw material from which these products are derived. The difference between a good crop of lambs and a poor crop usually spells the difference between profit and loss in the year's business, and especially is this true in these latter days of high prices and narrow margins.

The common method of lambing, i. e., the open range method, is practically the same as has been followed from the beginning of the sheep industry. It has come to be considered by many sheepmen as the only practical method to use under the conditions existing in the Southwest. They believe that the practice of lambing in pastures and corrals with individual pens, which has been followed successfully under the direction of the Forest Service in Colorado, is not adapted to the range conditions that exist in Arizona and New Mexico. A few sheepmen, however, who have tried out the newer methods have such confidence in their superiority that it has raised an interesting question regarding the desirability of a larger number of sheepmen adopting the changes in lambing methods.

The very limited extent of agricultural land in Arizona and New Mexico as compared with the vast area which is adapted only for the production of native forage plants, requires stockmen in general to depend upon the natural growth of vegetation for feed during the entire year. This situation makes it necessary, except in a few favored localities to lamb on the open range. The need for green succulent forage during the lambing period and for abundant feed during the

months that the lambs are developing, together with the desirability of having lambs ready for the market as early as possible, has led to the practice of lambing as early in the spring as weather conditions will permit. In the desert country of the lower elevations the early spring feed including alfalfa (*Erodium circutarium*) and Indian wheat (*Plantago argyrea*), starts

snow flurries. This was true in many places during the spring of 1915, and as a result, nearly three times the amount of loss was reported from this source as was caused by predatory animals and other causes. Comparisons of the number of lambs secured on the mountain ranges, and the number of lambs on the desert reveal a difference of about 20 per cent in favor of the lower range. The main factor in this difference is evidently the degree of protection against unfavorable weather. Other factors which vitally concern the success of lambing, are, protection against predatory animals; the insurance of plenty of feed and water during the period; the control of losses due to excitement and "chousing;" the protection of the current season's growth of forage, as well as the permanent productive value of the range; and a control of the costs of the operation. The method of lambing which promises to best control these various factors, and as a result secure the largest number of good lambs at the lowest cost, will receive the careful consideration of sheepmen.

### The Open Range Method of Lambing.

The open range method is commonly practiced, not because it has special merit, but because it is the easiest method to follow. It is a remnant of the old days of free range when flockmasters moved about from place to place as feed and water conditions prompted them. No improvements were constructed, except perhaps temporary brush corrals, which they could leave without financial loss. The method has not developed with the progress in range management, and is not necessarily adapted to the present condition of the sheep indus-



1. View of Andrus & Banta Lambing Corral Showing Main Divisions; the Shed With Its Individual Pens; and in Background Cook Tent and Part of Two Pastures. 2. Ewes With Young Lambs Graze Openly and Contentedly In Pastures.

growth in January or February, and the very moderate weather which usually prevails enables sheepmen to begin lambing at that time. At the higher elevations, or above 6,000 feet, spring opens about April 1, and lambing operations begin from that time until the middle of May. At these elevations, however, the entire month of April and a part of May are apt to be characterized by cold rains and

try. The sheepman on the National Forests now knows, with a reasonable degree of certainty, the range which he may use for lambing purposes from year to year, and in most cases is warranted in making such improvements as will enable him to conduct his business in the most satisfactory manner.

Briefly, the open range method consists of driving the band of ewes to the lambing grounds and herding them there until the lambing period is over. Two or three men are kept with the drop band. The lambs that are born during each period of 24 hours are bunched together and placed in the care of one herder who handles them in the vicinity of the lambing grounds until the lambs are strong enough to travel, which is usually in from five to eight days. They are then placed with the lamb band, which, when finally made up, includes from 1,000 to 2,000 ewes with lambs. For an average band of 1,500 ewes, about twelve men are employed. This force includes one foreman or caporal, one cook, two to three men with the lamb band, and five to seven men with the small bunches of lambs. The method provides no protection at night against predatory animals and no protection against severe storms, and does not provide facilities for giving individual attention to ewes or lambs.

Modifications of this method consist of the use of small temporary corrals to hold for one night the lambs dropped during the day. In some cases a large corral is used to enclose the main drop band at night. Opinions among sheepmen seem to be more or less equally divided concerning the value of this main corral. Some contend that it is desirable in order to protect the sheep from predatory animals and from storms, and in some cases to prevent the loss of sheep by straying from the lambing ground in search of feed. Others contend that the use of such corrals is unsatisfactory because of the loss among young lambs, due to trampling and separation from their mothers when in the morning the main band is taken from the corral to the open range.

### The Pasture and Corral Method of Lambing.

The pasture and corral method of lambing, as applied in the Southwest, particularly by the Andrus & Banta firm on the Datil Forest, follows the general plan introduced by the Forest Service on the Cochetopa National Forest in Colorado. The drop band is run on the open range during the day, and is placed at night in a large circular corral, divided into four divisions. A shed divided into from 60 to 80 individual pens extends through the corral. Opening up from the corral, and accessible to water, are three or four coyote-proof pastures, comprising 40 to 60 acres each. A night man makes the rounds of the corral every hour and removes the new lambs with their mothers to individual pens under the shed where they are left until the following day. Weak lambs and deserted lambs are given such individual attention as is needed. In the morning the drop band is taken to the open range and herded within one or two miles of camp. Lambs born during the day are gathered in the afternoon and left over night in one bunch, often in a temporary corral, and are given such protection from predatory animals as is considered necessary. Some owners leave a lantern or a bon-fire in the vicinity, which is generally an effective protection. The Andrus-Banta firm do not protect these small bunches, and report that no serious losses due to predatory animals have occurred among them. About noon of the following day the lambs left on the open range from the previous day's drop are taken to the main corral, and together with the lambs born during the night are placed in one of the series of pastures where they are left for two days, and then placed in an adjoining pasture. This process is continued through the series of pastures, and when the lambs are approximately eight days old they are removed to the open range, where they form a part of the main band.

The number of men employed in lambing by this method is six, distributed as follows: two men with the

drop band, one night man, one with the lamb band, one cook, and one foreman. This number is approximately one-half the number employed in the open range method. The saving in labor is due to the fact that the young lambs are run in pastures until they are old enough to turn in with the main lamb band. The employment of the night man in connection with the use of sheds and corrals, making it possible to give individual attention to lambs and ewes, and to separate the ewes with young lambs from the main band, is an essential feature of this method. This arrangement obviates the objection made by some sheepmen to the use of corrals, because when the drop band is removed from the corrals in the morning, the unsatisfactory process of separation, which causes so much trouble in the ordinary method of lambing, is no longer a source of loss. It is coming to be more and more generally recognized that, in order to secure proper conditions for the best development of the young lamb during its first few days of growth, it is necessary to leave both the ewe and the lamb quiet and free from excitement. Such conditions prevail in the pastures, where they are not disturbed, except when it is necessary to move them from one compartment to another.

An objection that is frequently heard to the plan of removing the new lambs from the herd to the individual pens, because of the theory that this operation disturbs the ewes to an injurious extent, is not supported by actual results. In fact the almost unanimous opinion of those who have been using the method is that, after a night or two, the ewes become accustomed to the night man moving among them and pay scarcely any attention to him. The theory that this repeated interruption during the night is apt to make the ewes unduly nervous through loss of sleep, does not appear to be a serious objection when it is recalled that sheep probably sleep not more than two hours during the night.

No accurate figures for the Southwest are available to show the com-



comparative number of lambs secured by this method and by the open range method. It is reasonable to suppose, however, that an increase in the number of lambs may be expected from the application of the pasture and corral method in the Southwest, comparable to the increase secured in the states farther north, where this method has been practiced to a considerable extent, and where the increase ranges from three to seven per cent. Two permittees on the Datil Forest estimate, after an experience of two years with this method, that they will secure on an average ten per cent more lambs than by the old method.

The total cost of the improvements constructed by the Andrus-Banta firm for lambing 1,500 ewes was approximately \$1,000.00. This included fencing four 40-acre pastures, and building the circular corral and the shed. These improvements are of the first class and it should be possible to duplicate them almost any place in the Southwest, for not more than this amount. If an average saving in lambs of 3 per cent, which is doubtless a conservative estimate, can be realized each year, the saving on the basis of \$4.00 per head would amount to \$180.00. The saving in labor and supplies, which amounts to the wages and board of six men for one month, is equivalent to \$160.00, thus, an annual saving of \$340.00 should be realized on an investment of \$1,000.00. In ten years, during which time the cost of maintenance should not exceed \$300.00, the income realized should be \$2,100.00 above expenditures.

The amount of range used in connection with the pasture-corral method of lambing does not vary greatly from the acreage necessary in lambing on the open range. The amount of forage consumed is, of course, the same in either case, but the greater concentration about one main camp, which characterizes the corral and pasture method, may require the allotment of perhaps an additional section, in order to insure the necessary protection to forage in the vicinity of the improvements. The number of sec-

tions which should be allotted for lambing a band of ewes will vary with the amount of palatable forage growing at that time of year, and with the character of the topography. Generally speaking, about one and a half acres in the better types of range, subject to season-long grazing, will support a ewe during the five weeks lambing period. From two to three acres are required in the poorer classes of range. Thus, to lamb a band of 1,000 ewes on the open range, an allotment of from two and a half sections to five sections is required. The number of acres that should be fenced for the purpose of lambing in pastures and corrals will likewise vary considerably. However, because of protection from grazing during most of the year, the carrying capacity of the enclosures during the lambing period should be from three



ANDRUS & BANTA LAMBING PASTURE

to four times as high as the capacity of the adjoining range. On this basis, the pastures may be stocked at the rate of from one-half acre to one acre per sheep. Assuming that, in a band of 1,000 ewes, an average of 35 ewes lamb each day, and that the ewes with lambs are held in each pasture for two days, the average number in each pasture during the period would be 70 head. To provide for this number the size of the lambing pastures should be from 35 to 70 acres, depending upon the quality of the forage. Since most of the lambing grounds are located where the stand of forage is good the range needed for lambing a band of 1,000 ewes should be four pastures of from 35 to 50 acres each, or a total enclosure of from 140 to 200 acres, and sufficient open range to handle the drop band and

the ewes with the older lambs—a total area of from three to five sections.

If it may be assumed that the corral and pasture method of lambing is superior to the open range method, the question arises as to the conditions under which it is advisable to adopt the improved method. There can be little question but that, theoretically, the best way to lamb is to turn the ewes loose in coyote-proof pastures, where there is plenty of shelter in the way of low trees or sheds, so that no avoidable loss may result from unfavorable weather. This method is excellently adapted to mountain meadows, where the carrying capacity is several times as high as on the common mountain types, where the size of the enclosures would be relatively small, and where the need of protecting the summer growth against grazing, thereby insuring a crop of hay for the ranch stock, would in part justify the cost of fencing the meadows. However, the instances of such meadows being available for lambing are very scarce. On the other hand, the use of corrals and pastures in connection with the open range was developed especially to meet conditions such as commonly occur over the mountain ranges of the Southwest. The carrying capacity of these areas is sufficiently high to enable a band of sheep to be handled satisfactorily during the lambing period from one center if allowed free access to the open range, but is not high enough to warrant the expenditure necessary to fence entire lambing allotments. The fencing of the comparatively small units suitable for handling the lambs until they are about eight days old is not excessively expensive when returns are considered, and the area enclosed is not so large that general grazing by all classes of stock will be seriously interfered with. This latter consideration is important in many parts of the Southwest where the open topography and the lack of fences permit cattle and horses to graze unrestricted, and where a proposal to fence any considerable area is bound to raise serious objection, because of its interference with established privileges. The

cost of improvements, and the benefits derived, are in direct ratio to the size of the outfit. That is to say, the improvements necessary and the range required to lamb 500 ewes will be approximately one-third of the amount necessary to lamb 1,500 ewes, and the increased returns in lambs will be approximately one-third as much as in the case of the larger outfit. For these reasons, the improved methods of lambing are as practicable for one sized outfit as for another, and the method of using corrals and pastures supplemented by the open range may be successfully applied on any of the ordinary mountain ranges in the Southwest.

In summary, it may be stated that:

1. The open range method of lambing is not economical on the mountain ranges of the National Forests in the Southwest.
2. The best method of lambing, theoretically, is in coyote-proof pastures.
3. In practice, the best method to adopt on the average allotment in the Southwest is to lamb in corrals and pastures in connection with the open range.
4. The advantages of the improved methods of lambing over the open range method are: (a) an increase of from 3 to 7 per cent in the number of lambs secured; (b) improved conditions for the development of the lamb during the most critical period of its life; (c) a net saving of approximately twenty cents per head on the ewes to lamb; (d) the protection of the season's growth of forage, insuring that it will be available for lambing when needed.
5. The cost of constructing all improvements necessary for lambing a band of 1,000 ewes should not exceed \$1000.00.
6. The amount of range required for such a band during the five weeks lambing period would vary from three to five sections, according to the character of the forage and the general topography. The number of acres that should be enclosed would vary from 140 to 200 acres.
7. The pasture and corral method of

lambing is well adapted to any sized outfit and to any ordinary type of range commonly used for lambing in the Southwest.

#### ABOUT TEN-CAR RATES.

A woolgrower in Oregon advises us that his railroad has withdrawn its ten-car rate for shipments of livestock, and he asks if the Interstate Commerce Commission ordered them to withdraw this rate.

Up until April, 1914, the San Pedro, Los Angeles & Salt Lake Railroad maintained different rates on livestock, depending on the number of cars shipped. Under their tariffs shipments of livestock to Los Angeles of seven carloads or less took a rate of \$133; shipments of 8 to 14 cars, a rate of \$118; shipments of 15 to 19 cars a rate of \$106, and shipments of 20 cars or more a rate of \$99. Under this tariff Woodard & Bennett took a case before the Interstate Commerce Commission, claiming reparation because the railroad did not furnish the number of cars ordered, and those that were shipped, moved at the higher rate. In deciding this case the Commission took the position that it was a discrimination against the small shipper for the railroad to maintain a lower rate for large shipments than for single carload shipments, and in their opinion indicated that rates to market should be maintained the same on one carload as on a larger shipment. The Commission did not, however, order the railroads to withdraw the rates in effect for shipments of ten cars, and to establish in lieu thereof the rates in effect on one-car shipments. What the Commission said, was this:

"Defendant will be expected to eliminate them from its tariffs, and to establish in lieu thereof car rates applicable to any number of cars. There is no basis of record for determining the amount of such rates, but it does not follow, as a matter of course, that they should be as high as the present rates for single cars."

What the Commission intended in that decision was that the railroads

should withdraw the rates then in effect for large shipments and that they should establish rates on a single car basis somewhere between the rate previously charged on single cars, and the lower rate on the larger shipments. However, so far as we know, the railroads that maintained this ten-car rate to market, simply withdrew the ten-car rate and left the one-car rate in effect, which was distinctly contrary to the spirit of the Commission's order. This order of the Commission applied only to shipments of livestock to market centers, and has no bearing upon the ten-car rates maintained on breeding stock shipped between ranges.

#### FOREST SERVICE AND WEATHER BUREAU CO-OPERATE.

A co-operative agreement has been made between the Weather Bureau and the Forest Service, Portland office, whereby the former will give the latter advance notice of storms in order that stockmen grazing sheep and cattle on the National Forest range may be advised in time to protect the stock from the elements.

For some time the Forest supervisors have been gathering information in regard to lambing and shearing periods, and also in regard to the dates of the more severe of recent past storms. This information, together with a list of the grazing permittees on the National Forests, has been forwarded to the Weather Bureau. The Weather Bureau, in turn, will send out a circular to all stockmen telling them of the plan. Forest supervisors will be notified by telegraph of the advent of severe storms, and will pass this information on by telephone to National Forest grazing permittees. It is further expected that permittees will keep in touch with the supervisor, especially at such times as they may have their stock in exposed situations; for at such times knowledge of a coming storm will enable them to place the stock under shelter and thus avoid the severe losses which have been caused by storms, especially during lambing and shearing periods.



# Lambing In Sheds at Gooding, Idaho

By S. W. McCLURE.

YES, this is the only railroad in Idaho that maintained its train schedule during the February blizzard," so spoke former Governor Gooding of Idaho, as we stepped inside his new lambing shed and viewed the track upon which his feed cars run. Further, he said: "I have been in the sheep business here for many years; in fact I was among the first to ship fat lambs from Idaho to Eastern markets. In the old days lambs sold at from one to two dollars per head, and our increase ranged from forty to seventy

per cent. Wool was the principal product of the sheep, and, as it could be harvested without danger from storms, not much attention was paid to the lamb end of the game. Anyhow, with lambs at the old prices one could hardly go to much expense in an effort to save them. Things are different now; with Idaho lambs netting around \$5.00 per head, it is time the sheepman either should arrange to save every possible lamb or let some one else in the business who will. Under the old system

everyone lambled about the same time all over the West with the result that market gluts could not be avoided. I have been held up time and again under pressure of these fall gluts until I finally decided that the only way to play safe was to lamb at some season of the year when the other fellow couldn't. This meant lambing in February in Idaho, for we have the feed on which to do it. After a few years' experience in February lambing in open sheds, I became satisfied that I should either build sheds specially adapted to this kind of lambing or else

be prepared to lose my lamb crop every few years through heavy storms. With that thought in mind, I built these new lambing sheds last fall. They may not be perfect, but I have lambled in them more than a month now, and I see only a few places where changes might be made."

Continuing, the Governor said to the writer: "It is a little more than a fifth of a mile through this shed; a train makes the circuit three times a day. I want you to go through it carefully and tell the sheepmen about it

When Governor Gooding decided to build this new lambing shed, he first drilled a well on a small elevation in the center of a large alfalfa field. Here he got a good flow of water at a depth of 250 feet. Then he built a reservoir to hold 30,000 gallons of water. About 200 yards from this reservoir, on a piece of ground slightly sloping, he built his lambing shed. The shed is constructed in the form a rectangle with sides 600 feet long and ends 300 feet long. We shall describe the shed on one side, and that will answer for

all four sides, except that the ends are only half as long. Each shed is 20 feet wide inside and 12 feet high. The sides are formed of boards  $3\frac{1}{2}$  feet high. From the top of these boards two by fours extend up in the form of an inverted V to make the roof 12 feet high in the center. Over these two by fours, a 10-ounce canvas has been stretched to form the roof. This gives a roof  $3\frac{1}{2}$  feet high at the eaves and 12 feet in the center, which is amply height. Along the wall on one side is a row of individual pens, each



INTERIOR OF GOVERNOR GOODINGS LAMBING SHED.

through the National Wool Grower. If I have anything here that will be of benefit to them, I am only too glad to tell them about it. Here comes a train now, the 11:15; let's get aboard for it doesn't stop long." At this suggestion the Ex-Governor and the writer got aboard, but they didn't ride far; the cars were made for hauling chopped hay and barley, not people. Anyway, it stopped every few feet to unload feed, so in the interest of speed the writer stepped off and started through the best winter lambing shed in America.

four feet square, equipped with a gate to receive ewes that have just dropped their lambs. Then we have an alley 3 feet wide to be used as a passageway. On the floor of this alley is laid a small railroad track over which the feed car passes. Then on the other side, we have a row of pens, each 13 feet wide by 25 feet long. Thus the width of each shed is taken up as follows: First, the four-foot pen; then a three-foot alley; then a pen 13 feet wide; this is the plan all through the 1800 feet of shed except that along one shed, individual pens have been built on each

side of the shed. This gives a total of 640 individual pens, each four by four, and 48 pens, each 13 by 25; also 24 pens, each 25 feet long by 9 feet wide. Each pen throughout the entire 1800 feet is supplied with running water. This water is carried in a trough made of two boards, each four inches high and set perpendicular 4 inches apart. There is no board set in the bottom of this trough as a piece of light tin has simply been bent so as to form the trough and is set in between these two upright boards and tacked to them at the top. The joints in this tin are not soldered but are glued together with rubber cement. This gives a leakproof and inexpensive joint. A trough exactly similar to this runs along each side of each shed, a total distance of 1800 feet. This trough is kept full of running water that comes from the cistern by gravity. Between each individual pen is placed a small feed box so that the ewe on each side can feed from it. This feed box holds enough cut hay for two ewes. Each of the large pens is supplied with a larger feed rack. These feed boxes are next the alley so that as the feed car passes along the chopped hay is easily shoveled into the feed boxes by the man riding in the car. The car holds about 1000 pounds of cut hay. At five places along the walls of the shed two of the individual pens have been left out, and in each such space a coal stove has been erected, which is kept fired up all the time. To these stoves, all the lambs that need warming are brought. Then the entire 1800 feet of shed is wired for electricity with an electric light every 50 feet.

On account of the shed's being roofed with canvas, it lets in ample light and ventilation. But these sheds are warm, too warm we should say, and to meet this situation, doors have been cut here and there to keep the temperature right.

As these sheds are built in the form of a rectangle, it gives a yard in the center, not under cover, 600 feet long and 300 feet wide. In this yard, the drop band is kept. This gives a yard sufficient for 3000 ewes. Whenever a

ewe drops her lamb, she is loaded on a sled and hauled to the nearest opening in the shed. She and her lamb go into one of the individual pens where they are kept for 24 hours. At the end of that time they are moved across the alley and turned into one of the larger pens with other ewes and lambs. Here they remain for three to six days and whenever the lamb is strong enough, they are turned outside into a pen holding 250 ewes and their lambs. A row of pens of this size runs entirely around the outside of all the sheds. In these large outside pens, the ewes and lambs will be kept until grass comes. All of these outside pens are equipped with feed racks, and windows have been cut in the shed so that these outside ewes stick their heads through and drink from the running water in-



GOV. GOODING DOCKING WITH THE HOT IRON.

side the lambing shed. At the end of two of these sheds, hay bins have been erected that hold each about 10 tons of cut alfalfa. Into these hay bins the tracks of the railroad extend so that the cars run in here, are loaded with cut hay and go off down the sheds to the point when the hay is needed. Everything is convenience.

Ex-Governor Gooding started to lamb in this shed February first. In one day 800 lambs were dropped and taken care of; 12,000 ewes will be lambbed in these sheds. To me this shed looked like the acme of perfection, nothing wasted, everything handy, efficiency everywhere. We asked Ex-Governor Gooding, if after a month's use, he felt that the shed would pay and what changes he would suggest.

He replied: "This shed does not stand me a dollar now. We have passed through a blizzard here. The thermometer dropped to twenty degrees below zero and thirty-six inches of snow fell. Yet in this bad weather, we lost no lambs from storms. You can imagine where we would have been without this shed."

"In the general plan of the shed, I see no changes that should be made unless it be in the canvas roof. Maybe that will not last long enough, but I will take it off and roll it up in the summer time. In the yard where the drop band is, we should have electric lights and I will have three 500-candle power lights put up next week."

"I will improve the feeding arrangements before another year. We are satisfied that cut alfalfa is the proper feed. It has a feeding value for lambing ewes about 25 per cent higher than when fed without cutting. Next summer I shall build two large bins where I now have the small ones that will hold about 200 tons of cut hay. Then instead of staking my hay in the field, I shall haul it right in here and cut it and blow it into these bins. That will save the expense of staking, and cut hay takes up only about one-third the room of loose hay."

"Probably I shall build silos here and feed silage, but I may not get to it next year. Maybe as time goes on, new changes will be worked out, but I cannot think of any needed now."

Governor Gooding was docking lambs with the Ellenwood docker the day we were there; 1148 lambs had been docked with this iron, and the Governor was much pleased with the result.

Governor Gooding has here a most excellent shed, yet it is inexpensive, practical and efficient—the best shed by long odds that we have ever seen, and we have seen many in different states. What a fine thing it is to see this demonstration of progressiveness here in Idaho, where the world's best fat lambs are raised. What a sight it was to walk down one of these long isles and see on each side excellent Lincoln ewes mothering equally choice



lambs; how different from the old way. Finally, some employee has tacked a sign over the entrance to one of these sheds reading "Rooms 50 cents per night." These are most reasonable rates for the accommodations furnished—electric lights, heat, running water, and meals served in each room. If there be anywhere else one could get these accommodations for that price, we have not struck it.

### AN ILLINOIS LETTER.

Business has prevented me from carefully looking over the convention number of *The Wool Grower* until this late date. I have met with a few who attended the convention and each one gave a glowing account of it. It must have been an unusually good meeting for, in addition to the testimonies I have heard, the addresses you have printed bear ample evidence of its excellence.

In his characteristic flowing and charming style, the president gave keynotes which should set any convention to going properly. I especially appreciated his admonition to turn paper profits to actual profits, for my experience among Western sheepmen a few years ago showed me how optimistic they are when times are good and therefore how prone they are to invest deeper instead of canceling indebtedness. Professor Marshall's address was very instructive. While I flatter myself to the extent of assuming that I have read rather widely on Australian and New Zealand conditions, I wish to say that Professor Marshall's discussion gives me a much clearer idea of those conditions than I heretofore had. Mr. Ellenwood digs up a bit of history on the early days of sheep raising in California, which, I am sure, has not been widely disseminated. And how interesting are his data on different methods of docking. His experience does not coincide with my own, therefore I hope you will induce him to tell us all about the docking iron he has perfected. And I should like to know the details of his best method of castration.

I think Mr. Knollin hit the nail hard and true on the farm flock situation in the Mississippi Valley and East. In discussing this question I am gratified to note optimism in his remarks. In the aggregate our small farm flocks should be a greater factor in our country's mutton and wool supply, and before many more years have passed I confidently believe that they will.

Permit me to congratulate you upon having such a good convention and such a splendid report of it in *The Wool Grower*.

W. C. COFFEY, Illinois.

### EARLY LAMBS IN IDAHO.

A prominent Idaho woolgrower, writing under date of March first, speaks as follows: "Early lambing is practically over, and the weather has



A PAIR OF GOODINGS LINCOLN EWES.

been very good. We have had no storm since the big snow in the early part of February, and only a few degrees of frost at night now. Sheepmen have saved all the lambs they desired to and big percentages are ready for marking. I question if we have last year's number of lambs in proportion to the ewes bred; owing to the dry fall, many ewes did not get with lamb. However, we had more ewes bred, so the early lamb crop will be larger. Grass is just starting in the Boise Valley, and a few warm days will bring it along as there is moisture everywhere. The snow, however, is lying very far down in the foothills, and it will mean considerable time spent in the sagebrush before we can get to the hills.

We have an abundance of hay, but it is selling very high, up to \$9.50 per ton.

"Considerable wool has been contracted around Boise at an advance of four cents over last year's price."

### A USEFUL ORGANIZATION.

The stockmen of Idaho Falls several years ago organized the Bingham County Grazers' Association. This organization handles all general affairs for its members. The Association has issued 8311 shares of capital stock, covering 170,480 head of sheep, 7674 head of cattle. Among other things it leases a considerable amount of land from the State of Idaho.

It has for several years been very active in the destruction of predatory wild animals. At the present time this Association is paying \$1.00 each bounty on coyotes and wild cats and \$15 on wolves. Last year this Bingham County Grazers' Association paid bounty on about 1100 predatory wild animals, the payments amounting to \$3,055. Last year it paid a bounty on 631 coyotes, at \$3 each; 172 coyotes, at \$1 each; 140 coyotes pups, at \$1.50 each; 63 wild cats at \$4 each; 12 wild cats at \$1 each; 9 wolves at \$25 each; 3 wolves at \$15 each and 5 wolf pups at \$5 each.

The Association has a large number of members and each year collects \$5 dues from each of its members and pays this amount to the National Wool Growers' Association. We believe that sheepmen in other parts of the country could well adopt the plan under which the Bingham County Grazers' Association operates.

### AROUND GREEN RIVER, WYO.

January was one of the coldest months for a great many years in this section. Snow was about twelve inches deep where we were wintering our sheep. However, we have come out in very good condition.

Coyotes are very bad here, and the bounty is about \$4.00, so a few good trappers could do very well in this section.

EDWARD BARRETT, Wyoming.

## THE SHEEP MARKET AT CHICAGO IN FEBRUARY

**A**LTHOUGH considered as top heavy much of the time, February's live mutton market held remarkably even. Much prophecy was vindicated. Prices advanced sharply early in the month and the market was subject to no violent downward fluctuations at any time, holding remarkably steady with lambs at the highest average prices on record. Bare Eastern markets were responsible for a broad shipping demand on Eastern killing account.

The month produced the record lamb average of \$10.90, compared with \$10.35 for January of this year. The highest preceding month's average was \$10, hung up in May, 1915. Matured muttons (ewes and wethers) sold at the average of \$7.65 for the month, 5c per cwt. below the record average of April, 1915, but with that exception the highest on record and 50c higher than the preceding month. Closing prices were within 10c to 25c at the high point of the period and stood mostly 60c to 75c higher on lambs and 50@75c higher than the general run of sheep and yearlings than the close of January, prime heavy native ewes showing advances of more than \$1. Numerous former yard records were shattered, native lambs selling as high as \$11.35, or 85c above the yard record prior to the current year; fed Western lambs, other than Colorados, reaching \$11.50, or 50c above the yard record prior to 1916 and several loads of feeding lambs going out at a cost as high as \$10.90, against a \$9.85 yard record previously. Fed Western yearling wethers sold upward to \$10.35, or 20c per cwt. above the record established in April last year, while feeding yearlings sold to \$8.50, also a new yard record.

Subsequent to February 7, there were only three or four days of the month when prime handy weight lambs were not quotable to \$11.50, a lot of Colorado-fed Mexicans being but over at that price and several loads of fed Westerns. Colorado was a free

contributor to the month's movement and at the close of the period it was estimated that 40 per cent of the season's run from that source had been marketed, making bare spots on the April and early May markets a strong probability, as fed Western stuff from other sources is already sharply diminished supply, and feeders are having access to very little to put in for a late feed.

Many of the Colorado lambs, as well as fed Westerns from other sources, came weighty, and heavy stuff was subject to more or less severe discrimination, although much of the period killers were forced to buy for numbers and at such times, heavy lambs sold comparatively close to the top. Eastern demand, however, was insistent for the handy weight stuff, and finished lots weighing under 85 pounds got all the best of the demand at all times.

The reopening of the feeder outlet at Chicago on February 14 was a signal for a skirmish on the part of feeders and shearers for supplies, but very little suitable for that outlet appeared and the killer competition was so strong that feeders faced a high-flying market. Most anything desirable in the feeding lamb line sold at \$10.50@10.75; several carloads went to Michigan finishers and shearers at \$10.80@10.90 and a load or two of well fleshed lambs of high shearing capacity sold "p. t." up to \$11@11.10 toward month-end. Only one lot of feeding yearlings went out, it at a cost of \$8.50 and no matured feeding sheep sold for that purpose on this market, although thin, aged Western ewes, direct from Montana, went to the country from a nearby feeding station at a cost of \$6 per cwt.

The advance in the wool market was a factor of great underlying strength, as wool at present prices is carrying much of the load. The market, however, on the few loads of shorn lambs received showed advances almost commensurate with the gain on wool stock, fall shorn lambs selling upward to \$10.15 and December clips to \$9.75.

It was largely a lamb run from Colo-

rado and feed lots. Natives were very scarce and few of them had quality. Fed Western and Colorado-fed ewes were offered in some profusion, selling with a top of \$8.10, many from \$7.75@8 during the month. Because of marked scarcity and their high pel values, heavy native ewes commanded a premium, the bulk selling the last three weeks of the month at \$7.75@8.25 and a few as high as \$8.50 at the close. Matured Colorado-fed wethers sold up to \$8.75 and a small bunch of 87-pound two and three-year-old fed Westerns, most of them breakers, scored \$9.25. Most of the aged wethers, however, sold during the month at \$8.00@8.35, some early in the period down to \$7.65@7.75. A lot of heavy and strong weight yearlings were put over at \$8.65@9.75 during the month and several strings of handy fed Westerns and Colorado-Mexican yearlings sold upward from \$10 to the record of \$10.35.

Supply prospects, sharp advances in hogs and the gradual strengthening of the wool market indicates still higher prices ahead, new yard records being in sight on all classes before supply paucity is relieved by early shipments of new crop lambs from the Southeast and Western country.

Top sheep prices and range on bulk during January and February:

Week Ending—	Bulk.	Top.
January 8 .....	\$6.00@7.25	\$7.50
January 15 .....	6.75@7.50	8.00
January 22 .....	7.25@8.25	8.50
January 29 .....	7.00@7.80	8.25
February 5 .....	7.00@7.75	8.25
February 12 .....	7.00@8.25	8.25
February 19 .....	7.00@8.10	8.50
February 26 .....	7.25@8.35	8.75

Top lamb prices and range on bulk during January and February:

Week Ending—	Bulk.	Top.
January 8 .....	\$ 9.40@10.40	\$10.60
January 15 .....	10.00@10.85	10.90
January 22 .....	10.15@10.90	11.15
January 29 .....	10.00@10.85	11.10
February 5 .....	10.15@11.10	11.25
February 12 .....	10.50@11.25	11.50
February 19 .....	10.75@11.35	11.50
February 26 .....	10.50@11.35	11.50

If we could confine the benefits of the National Association's work to members of the National Association, outsiders would be offering \$100 apiece to get in.



# Wool Growing In Australia

By R. H. HARROWELL

A SPECIAL feature of the present season in Australia particularly in New South Wales, is an abnormal prevalence of ticks and lice in sheep. Lice are especially troublesome and the explanation lies in the fact that last season, owing to the drought, dipping operations were relaxed on such a large scale that these external parasites made great headway. The emaciated condition of the sheep also favored an increase in the pest, and the movements of sheep for agistment purposes continued to infect flocks in districts previously immune to lice.

It is perhaps necessary to explain that a large portion of Australian sheep country—owing to climatic conditions is unsuited to the propagation of ticks and lice. In the far inland districts ticks cannot live, and if infested sheep were driven out there the ticks would very shortly disappear. So that at present it can be said that there is a very definite climate boundary to the sheep tick pest. The same can almost be said in regard to lice, but lice are being found to survive beyond the tick boundary.

Australian sheep owners once had experience with scab. It was rampant in the country. Strict legislation was brought into force, and universal eradication methods were insisted upon under pain of heavy penalty. The result was complete eradication of the pest, and for considerably over a quarter of a century there has not been one case

of scab in the whole of the Commonwealth.

Australian sheep owners have therefore had an object lesson on the power of combined effort in connection with the eradication of a parasite pest, and although ticks and lice rank less destructive than scab, the lessons of the past have not been forgotten and gradually one state after another is dropping into line as far as compulsory destruction of ticks and lice is concerned.



DIPPING SHEEP IN AUSTRALIA.

Although ticks and lice are not as formidable as scab, if they are not kept absolutely in check, they can very seriously reduce the profit of sheep farming.

## The Tick.

The sheep tick or ked, as it should really be called, is a restless insect, prone to move about the fleece, and thus the denser fleeces of merinos being less habitable are less troubled by ticks than the British breeds. It is found in greatest numbers on those parts of the body which the sheep cannot reach.

The presence of the tick is usually shown by sheep nibbling at their sides, or rubbing against anything for relief from the skin irritation, which tick bites set up. The irritation resulting from tick bites has been found by experiments on the human hand, to be more irritating than mosquito bites. This is supposed to be caused by the parasite injecting a poison into the wounds to prevent the blood congealing, thus conducting to its continuous flow until the insect is filled. However, that may be, when ticks become very numerous they torment the sheep so seriously that it goes off its feed and quickly loses condition.

A true adult tick has eight legs whilst a ked has six. A true tick spends only a portion of its existence with its host and when gorged, falls away on the pasture, and for considerable periods, leads a separate life. On the other hand a ked stays with its host unless some accident obliges or enables it to transfer

itself to other individuals.

True ticks deposit eggs in vast numbers amongst the damp herbage, whilst according to reliable authorities the female ked does not deposit more than three to five eggs, at intervals of a few days, when it dies, and these are not really eggs, but small oval shining cases or shells which, in appearance, have been compared with "linseed" or the pips of an apple. When deposited in the wool these shells already contain living pupae, which have previously been

hatched and nourished inside the body of the female parent insect.

The ked, or "*Melophagus Ovinus*," or by that name which it is most familiarly known by sheep farmers the world over—the "sheep tick," somewhat resembles a wingless fly. In some parts of England it is called the "louse fly," because, like lice, it deposits its egg amongst the fibres of the fleece. As already stated these "eggs" are just little cases containing imperfectly developed larvae. When being deposited, the female attaches them to the wool by means of a sticky substance which she exudes, to prevent them falling from the fleece. At the hatching about three weeks afterwards, a round lid breaks off the end of this case, and the insect, with all its adult characteristics, emerges through the opening and commences its active life in the fleece.

Bearing as they do upon the efficacy of dipping, these facts about ticks' eggs should be carefully kept in mind by sheep owners.

Sheep ticks pass their whole life on the sheep and by their structure, it is improbable that they can exist many days apart from it. Just how long they can do so, is of great practical importance to know. Experiments have shown that if deprived of blood well grown sheep ticks do not survive separation four days, and only under the most exceptional circumstances do they survive separation a week. When taken from the sheep and placed in wool in a favorable temperature, experiments have shown that moderately well fed ticks all die in less than four days. One instance is on record where ticks' eggs were placed under very favorable conditions, and their issue survived hatching nearly two weeks.

When placed on the back of the hand and observed through a lens these young ticks were seen to bore through the skin, and their abdomen to swell slowly as they sucked up the blood. Only a slight twinge was felt when their bills first penetrated, but small swelling followed in a day or two, and itched most persistently for more than a week.

Though sheep ticks cannot live apart from their hosts for more than a few days they most readily pass from sheep to sheep. At shearing time especially when deprived of their shelter, they transfer themselves in vast numbers to the longer wool of the lambs, which they persecute relentlessly, and even attach themselves to the clothing of people handling the shorn wool.

#### The Louse.

The only species of this genus found on sheep is the *Trichodectes sphaerocephalus*. It is distinctly smaller than the *Haematopinus*, light grey or almost white in color, head and thorax iron red, and bands of the same color on the body, suggesting, no doubt, the name of "Red Louse" by which it is commonly known in many countries.

When gorged, it is often of a pink color, and sometimes it is seen of a yellow tint, resembling bits of dried yolk. The head of this louse is as broad as long, legs short and stout and provided with hooks for holding on, or moving about. It is found usually close to the skin, which it bites through with mandibles like those of a spider, causing intolerable irritation, and producing scurf, which sometimes gives the appearance of scab.

This louse is an extremely active little pest. It is endowed with marvelous fecundity and tenacity of life, which characteristics explain, and also justify, the apprehension with which this pest is everywhere regarded. Being without wings, lice hold fast on to their host, and never leave it, until it comes into contact with other animals when with instantaneous rapidity, they transfer themselves to fresh victims. A single infected ram has been known to infect a whole flock in an incredibly short time.

Lice attach their eggs, called "nits," to the fibres of the wool by means of a dense sticky substance, emitted by the louse when the eggs are laid. This substance does not discolor the wool as eggs and excreta of sheep ticks do. The eggs are oval, of a pale color, and are usually found close to the body of the sheep. At the time they are hatched, the young lice very closely resemble

the adults, though smaller in size.

The female is larger than the male, and is by far the more active of the two.

Many owners often are unaware of the presence of these insects, which are so extremely minute that not every man past middle age has enough sight to perceive them. Irritation of the skin often may have been noticed, but as the insects escape recognition, the trouble has been attributed to other causes.

Thus flocks fall out of condition, and the wool deteriorates, for the want of the proper remedy, namely, a thorough dipping in an effective poisonous preparation.

Any difficulty in recognizing the presence of lice in sheep however is confined to the earlier stages of their attack.

When seriously attacked, the animal nibbles its flanks or other affected parts of the body with such persistency, and some times frenzy, that bald patches suggestive of mange appear, and its teeth have been found matted with wool from constant plucking. Whenever a sheep is seen to be engaged in nibbling itself, or scratching with its hind feet, it should be examined closely for lice, by means of a magnifying glass.

In regard to the damage lice can do Mr. F. H. Williams, Chief Inspector of Stock for South Australia, in a recent official report says: "In a state like South Australia, where a pride is taken in growing some of the finest wool in the world, what can be more deplorable than the sight of lice-infected sheep, with their wool plucked and rubbed from their bodies and their condition approaching a vanishing point. Last year, I estimated the annual loss to the state in wool alone at \$500,000 but I now believe this is far below the mark, as lice have, I regret to say, been discovered by the inspectors over a much wider area than previously and many thousands of sheep will only yield poor clips of low value. It is extraordinary that owners should have to be forced into dipping their flocks, when it means so much to them financially."



The foregoing information in regard to tick and lice may of course be stale news to some of your readers, but there may be many who find the subject interesting. As far as Australia is concerned it is sufficient to state that these parasites are looked upon as very noxious pests, and very efficient machinery is in existence in several parts of Australia to cope with them. Gradually all the states are falling into line, and the only solution to the problem is universal compulsory dipping. Experience in nearly all the states, extending over many years has proved that half measures are useless and unworkable. It is, for instance impracticable to have legislation which compels only the owners or tick and lice infected flocks to dip—the only solution is to make every sheep-owner dip. This is not looked upon as a hardship by any careful sheep-owners—in fact they welcome compulsion, for otherwise their flocks are always menaced, should they have careless neighbors. Exactly what Australian legislation and regulations are in regard to dealing with the external parasites of sheep are quite interesting enough to justify a second article as space has here run out.

### HIGH PRICED STALLIONS.

Recently a half interest in the imported Perchorn stallion Carnot, was sold for \$20,000.00. This would place the value of this stallion at \$40,000.00. Since Carnot was sold, Peter The Great, a standard bred trotting stallion twenty-one years old, has been sold for \$50,000.00.

### FROM TWIN BRIDGES, MONT.

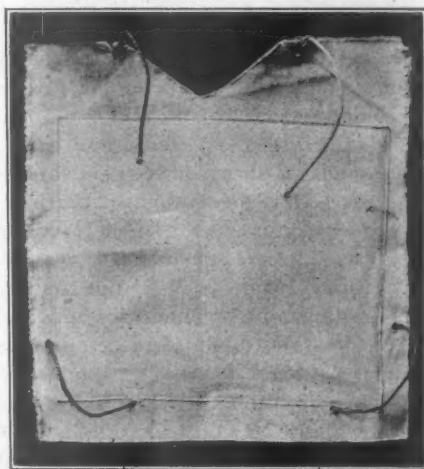
I enjoy reading the National Wool Grower and consider it one of our best sheep papers. I have just purchased from Knollin and Finch of Soda Springs, Idaho, one hundred registered Shropshire ewes. As this is my first experience in the sheep business I am very glad to have any information I can get.

T. W. JENKINS, Montana.

### THE ELLENWOOD LAMB BLANKET.

On this page is a photograph of a lambing blanket used by F. A. Ellenwood of Red Bluff, California. This blanket is simply a piece of canvas lined with soft cotton cloth. The canvas is 15 inches wide by 16 inches long, with a small portion cut out for the neck. A string is looped in each corner on the lower end of the blanket through which the hind legs of the lamb are shoved. On each side of the front of the blanket a string is fastened to be tied across the lamb's chest.

In lambing on the open range, many are lost because of cold rains or snows that happen to occur during the



THE ELLENWOOD LAMBING BLANKET.

first few hours of the lamb's life. Mr. Ellenwood has about 60 of these blankets that he uses in just such emergencies, and saves many lambs thereby. If it is storming when the lamb is dropped, one of these blankets is put on it, and left from 2 to 5 hours as occasion may demand. He has not found it desirable to use blankets on lambs from two-year-old ewes, as it frightens the ewe somewhat, but with older ewes he has experienced no difficulty.

Mr. Ellenwood is a very practical sheep man, who has had large experience, and he assures us that this blanket will save many lambs, and we

cannot see how it could be otherwise. Certainly there are many places in the West where open range lambing is hazardous, on account of cold or storms. In such sections this blanket will prove valuable. These blankets may be made from any old piece of canvas at no expense, and they seem to offer such a saving that they should be given a fair trial.

### SHROPSHIRE SELLING

We have just recently sold 100 registered Shropshire ewes to Mr. T. F. Jenkins, Twin Bridges, Mont. Mr. Jenkins will use these ewes as the foundation for a flock which he hopes to build up in the "Treasure State" that will be second to none.

As Mr. Jenkins owns one of the best improved farms in the State of Montana, and is growing at the present time all the feeds requisite for the maintenance of a flock of sheep in the best possible condition, we predict that he will meet with success from the start.

Another gentleman who is convinced that the "Golden Fleece" Shropshire is the best breed on earth, is Mr. N. O. Brown of Turlock, Calif. Mr. Brown has just visited us and took home with him 75 ewes and two yearling rams which will be used to start a flock of pure-bred Shropshires on the Pacific Coast.

Mr. Brown has a nice farm in the Jan Joaquin Valley where he informed us that the flowers were blooming nicely when he left for our place (Jan. 25th). As we were wallowing around in a couple of feet of snow, we rather envied the Shropshires their new home. But we feel certain they will give a good account of themselves there, and we will be consoled by the thought that in the future, our Shropshire flocks will be well represented in the "Land of Sunshine."

KNOLLIN & FINCH,

Soda Springs, Ida.

The woolgrower that does not help us cannot expect us to help him.

## THE COMMERCIAL TRADE SITUATION.

By E. R. Johns.

Government statistics regarding supplies on hand of the various domestic animals used for slaughter in the United States are, as a rule, reasonably authentic. However, a recent statement by Washington officials that there is an increased number of sheep in the hands of our flockmasters, as compared with one year ago, is given but little credence by those who are in position to "feel the pulse" of the present situation. "Water is bound to seek its level." As the river overflows its banks during the disastrous flood, so do the channels of trade in the wool and mutton industry overflow during periods of increased and overproduction, and receipts landing at the different market centers yearly are a reliable indicator as to total numbers that still remain in the hands of the raiser and feeder. There is no doubt that a great shortage exists in native localities, which condition has been brought about jointly by the "free-wool" scare at the beginning of the present political administration and government and local quarantine restrictions caused by foot-and-mouth disease, which have during the past 18 months so badly hampered the movement of breeding and feeding stock in nearly all sections where this branch of the industry thrives to any great extent. I am fully convinced that native districts contain no more than 50 per cent of the number of sheep to be found in these localities two years ago, but this condition won't long prevail, as there is a manifest effort on the part of the small producer to get back into the game, as an evidence of which fact the inquiry for breeding ewes overshadows all former years and many recent sales of choice, native stock are reported at \$10.00 to \$12.00 per head.

Usually at this season there are liberal numbers of sheep and lambs in the hands of feeders east of Chicago, but supplies to be marketed at Eastern points this spring are far below any recent former year. This shortage

has stimulated a broad demand on shipping account to Eastern points from our Chicago market, which has been the prime factor in "boosting" prices to the present "record-breaking" level. The prevailing high range of values can hardly be construed as advantageous to the majority of breeders and feeders usually identified with this branch of the livestock industry, as a very large portion of these operators have for more than a year past been crowded out of the game by Government and State quarantine restrictions, and in briefly reviewing the disarrangement of affairs owing to the prolonged siege of foot-and-mouth disease it seems opportune here to note the fact that throughout the year and a half of disastrous restrictions and inconvenience to flockmasters not a single case of the disease was found among the sheep of the entire country nor a single instance where sheep were the direct cause of spreading the malady. During the restricted period thousands of sheep, lambs, and breeding ewes have been sold on the market for slaughter at a great sacrifice that would have commanded satisfactory prices to go back to the country on feeding and breeding account and every hoof desirable for these purposes could no doubt have been shipped to the breeder and feeder without the least danger to the health of the live stock of any State in the Union. Could the healthy breeding ewe have gone out to replenish the depleted flock last fall and the feeder been allowed to remove from the market such stock as met his requirement, many angles of the trade would have been benefited and available supplies at this time much increased.

During the mid-winter feeding season of 1914 and 1915 this branch of the trade at Chicago was driven from our conveniently arranged sheltered market to open pens at the south end of the yards where for months the entire receipts of sheep and lambs were handled much of the time in mud and slush to the great disadvantage of both buyer and seller and severe loss to the feeder, but enough of this pessimistic review of things that have passed and

gone and to which I should not have alluded excepting to show the part they have played in bringing about existing conditions. We are back again to a clean and health basis, liberated so to speak, by the "powers that be," and while we earnestly hope never again to experience an outbreak of foot-and-mouth disease in this country, God grant that should it come officials in charge at the time it occurs may be possessed of at least ordinary intelligence, be devoid of political greed and have the strength of their convictions.

One by one local feed yards are being emptied of this year's crop and all markets will soon look to the Colorado feeder for supplies. Nothing can forestall the onward march of record-breaking prices throughout the balance of the feeding season. Even the "bears" are "bullish" on future prospects, referring to the very interesting letter of my good friend, Robert S. Matheson, which appeared in a recent issue of The Breeders Gazette.

Conditions brought about by the deplorable conflict that has raged in foreign lands during the past 19 months have eliminated any effect that the "tariff tinkering" of the present administration might otherwise have had on the wool and mutton markets of this country. The surplus of meats in Southern countries, much of which would have found its way to our ports have been absorbed by the allied armies abroad and, although imports of wool to this from other countries have been fairly liberal, the increased export from our manufactures to European nations, owing to war conditions, has more than offset this feature of the situation.

## TO CLASSIFY PUBLIC LANDS.

Senator Gronna of North Dakota has introduced a bill in the Senate which provides for a classification of the remaining public domain. The bill is a very excellent one and would prove the first step in a sensible disposal of range lands in Western states. It is doubtful, however, if this bill will receive the consideration that it deserves.



# Annual Meeting of Wyoming Wool Growers

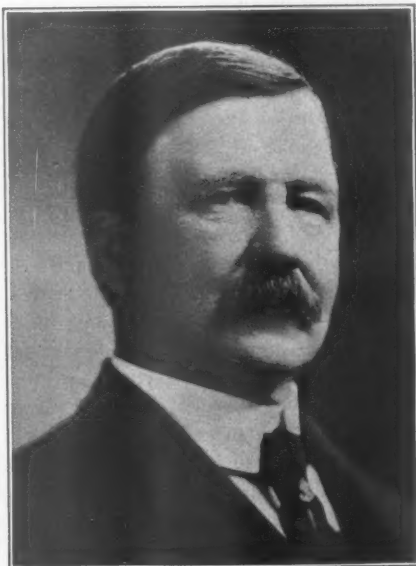
By ROSCOE WOOD.

THE Wyoming Wool Growers Association has come alive. That it is to be a live one from now on is assured by the attendance and financial support accorded it at Casper, and by the unanimous choice of Dr. J. M. Wilson of Douglas as its executive head. He is the man who first put it on its feet and made it a power in the councils of the National Association, as well as being instrumental in securing to the sheep industry the recognition and rights which were its due. Wyoming sheepmen are progressive; they have been fairly successful in their business, and while the encroachments of settlers upon the range in some sections has reduced their number, yet the majority of those who are now in the business are seeking ways and means of making it permanent so far as the land situation will permit, and improving their methods of production and marketing. As a powerful agent in promoting their welfare the state Association requires and deserves their support, and it in turn will render efficient aid to the National. The next meeting will be in a live town, Thermopolis.

The meeting was representative of all sections of the state. The southwest corner was there, as was the northeastern. Naturally the central portion was most numerous; but the southern part had a strong representation headed by President Rumsey of Rawlins, who has been an indefatigable worker in maintaining the organization. It certainly must have been a satisfaction to him to turn the Association over to his successor with a large balance in the treasury and a membership roll creditable to the position which Wyoming holds as a sheep and wool state. The north brought a strong delegation headed by that successful pioneer, Fred Bragg of Nowood, who takes a leading place in the new organization as its vice president. Harmony and co-operation were marked characteristics of the entire meeting—the only rivalry was that of

taking a place in order to render service to the Association and the entire industry. May this spirit continue when depression and times less profitable shall come!

Everybody was feeling optimistic. Many reported a good year in 1915, but several have not yet received their wool returns. Prices were good, but some conditions were otherwise. A short lamb crop, caused by spring losses, and a light wool clip reduced the total income. Prospects looked good to most sheepmen for the cur-



DR. J. M. WILSON, DOUGLAS, WYOMING,  
PRESIDENT OF WYOMING WOOL  
GROWERS' ASSOCIATION.

rent year. Except the eastern portion, most sections reported hard winter weather during January and the first week of February, but since then it has moderated, and there will be no loss, although some will have sizable feed bills. A band of ewes was sold at Casper during the week for \$9.05 per head, April delivery. A local speculator bought one or two clips of wool for 25 cents. No Eastern buyers or dealers were in evidence. It was reported that buyers were willing to contract lambs at 7 to 7¼ cents for next

fall, but no business was done so far as could be learned.

H. S. Ridgley of Cheyenne gave a talk on the land question in which he gave some interesting history. Thirty years ago the U. S. Supreme Court held that the stockmen were given an implied license to use the public domain. He expressed the opinion that it might have been better if certain sections of the public lands had been set aside in an early day for the livestock industry. He noted the division that had existed among various livestock interests in the past based on an opposition to government landlordism, but that at this time they were united in demanding a land policy which would give them stability to their business. He considered the development of the homestead movement, and that the 640-acre homestead was an inevitable result. He maintained the position which the great National Livestock Association now hold, viz.: That an intelligent classification of the remaining unappropriated public lands should be made before any increase in the size of homesteads should be provided, and land not capable of maintaining a family should be considered as grazing land. He thought the Western states should unite in obtaining the sale of such grazing lands, thereby securing two things to be desired, taxation of these lands and the stability and permanency of the livestock industry. He has given the subject much study from an unbiased standpoint, and his opinions are worthy of careful consideration by congressional lawmakers.

The program was varied, instructive, and entertaining. Shearing methods in Australia were described by W. T. Ritch, while Prof. J. A. Hill told of their use in Wyoming. Better preparation of wool and the purpose of the National Wool Warehouse was explained by President Holliday. F. S. King gave a learned discourse upon breeding and the necessity for improvement, and emphasized the importance of using good rams. The Na-

tional Wool Warehouse displayed its complete exhibit which has been at various conventions this winter, and was a subject of no little study by many sheepmen. That sheepmen are dissatisfied with present methods of marketing wool is plainly evidenced by their interest in the discussions and displays at the conventions. They are seeking a way out, but as yet have not found it. In the process they must unquestionably improve their flocks and methods with ultimate benefit to the entire industry.

One of the features of the Casper meeting was the Government wool car, which has been traveling through Montana, Idaho, and Wyoming, in charge of Mr. L. L. Heller of the Department of Agriculture, with the assistance of a representative from the experiment station of the state within which the car travels. In Wyoming, Prof. J. A. Hill, the wool expert at Laramie, is rendering Mr. Heller much assistance. These affable gentlemen in connection with their exhibit supply interested sheepmen with valuable information. Mr. Heller informed us that the attendance at the various stopping places has been surprisingly large, and men have been eager to learn of better methods of shearing and putting up their wool for market; especially was this true in southern Wyoming. While larger attendance was noted at the Montana and Idaho agricultural schools, yet the most range sheepmen who came to see and learn were in Wyoming. Improved shearing sheds were installed in that section last year, and the agitation for better wool preparation has appealed to these growers so strongly that this spring will witness the completion and use of many more. While few will go to the expense of the complete Australian system of skirting, classing, etc., yet many will improve or build new shearing sheds, grade their clips into two or three grades, and bale their wool. This latter is known as the American plan in contradistinction to the Australian plan. The car while showing the various market grades of wool, thus giving the grower an intelligent idea of

what constitutes fine, half-blood, etc., also carries several specimens of sheep to show the character of the individuals producing the respective grades. These sheep were from the Government flock maintained at Laramie. This car has been very popular this year, being wanted at many places where it could not go, and will make it an essential and important feature of the department's work in the future.

One of the progressive sheepmen of central Wyoming is John Carmody of Lander. He raises market-topping lambs from Cotswold rams and Merino ewes, and gets top prices for his wool. He studies his business. In conversation regarding marketing of wool, which is a live topic nowadays, he told us of a man in his section who took stock in the National Wool Warehouse when it was first started and had shipped his wool there every year since, without any exception, and in the total he had received more for his wool than anyone else in that locality. Speaking of his own experience, he declared that he never contracts his products, either wool or lambs, before they are ready for market. His lambs he watches closely as they grow and develop, and when he considers they are ready to go to market, they go regardless of the price. He is confident this plan has brought him the most money, one year with another, and his success certainly corroborates his methods.

Among the prominent visitors at Casper was the grand old Scotch shepherd, Robert Taylor, or as he is affectionately known to all his friends, "Bob." He is unquestionably one of the ablest sheepmen in America, who has studied his business from almost every angle and made a success of it. He has handled range sheep, he has bred and maintained choice stud flocks of several breeds, he has fed both sheep and lambs. At this time when the land question is becoming so vital to the range livestock industry we can not refrain from recalling Mr. Taylor's farsightedness about fifteen years ago when he stood alone among the sheepmen in advocating a lease law or any

other method which would insure to the stockman a land holding of some permanence whereby the industry could be placed upon a settled basis. He reports a good winter with his range herds in central Wyoming, while his breeding flocks on his Nebraska farm are well through lambing, and he reports a fine lot of "American Corriedales" of his own production from Rambouillet and Leicester foundation. He promised to give National readers a complete description of the Leicester and its development in both its native land and this country, and incidentally he may tell us something of his work in using them for crossing on the Merinos.

#### HEALTHY MARKETS AT OMAHA

Omaha is doing a phenomenal sheep business. February receipts were 199,136, making a two-month supply of 404,763 against 450,844 last year. The decrease, although slight, is logical in view of diminished feeding operations. Ten years ago, Omaha received but 128,612 sheep and lambs in February, and twenty years ago that market practically had no existence.

At the end of February, Omaha was on a \$10.90 @11.10 basis for good to choice lambs with fair to good at \$10.50 @10.85. Shorn lambs were worth \$9.25 @10.00; yearlings \$8.00@9.85; wethers \$7.50@8.25; and ewes \$7.50@8.00.

Early in the month, the bulk of lambs at Omaha sold at \$10.50@10.65 with a \$10.75 top. Ewes were worth \$7.15@7.25 and yearlings reached \$9.00. By the middle of the month \$10.65@11.00 took the bulk of lambs, good to choice being quoted at \$10.75@11.00; fair to good \$10.50@10.75; and feeders at \$10.25@10.55. For yearlings, it was a \$9.00@9.65 trade, wethers being quoted at \$8.00@8.25, and ewes at \$7.50@7.75.

There has been healthy competition at Omaha, and a large percentage of the movement from Colorado feed-lots has stopped there.

J. E. P.

Have you forgotten to pay your dues?



# Lamb and Mutton Permanently Established

An Interview with "BOB" MATHESON.

STRANGE things happen. "Bob" Matheson, Swift's chief sheep buyer, believes in higher prices. In a prophetic mood, he predicted the highest spring lamb market on record. "The spring lamb market this year will be higher than in 1915," he said. "The situation is the brightest and healthiest the trade has ever known. The course of 1916 markets, both in wool and live mutton, will be toward higher levels and, new price records will be made.

"Packers went into the winter season with practically no accumulation in their freezers for the first time in many years and have been on a hand-to-mouth basis. We are getting a little South American stuff at New York, but there are plenty of holes to put it in. The market position of the grower is impregnable.

"We cannot ignore the fact that wool and mutton production on this North American continent is not increasing, despite high prices. Fewer ewe lambs were saved last year than was generally supposed, and I can see trouble in coping with increasing demand. This winter the consumer is giving a surprising demonstration of his ability to buy the product and it ought to be encouraging to producers. Wool trade was never as healthy, and the prices packers are getting for pelts and pulled wools is a stout prop under the price list.

"Skeptics point to the alacrity with which hog production responded to the incentive of high prices, and predict a parallel in sheep, but the analogy is illogical. The hog is the most fecund of our domestic animals, while recuperating a sheep flock is a comparatively slow process. The conten-

tion also is made that an abundance of pork means keen competition for lamb and mutton, but this point is at least debatable, and what has happened recently is calculated to disprove it. Early in the winter \$10.00 was paid for lambs, and pork was cheap at that juncture, consequently it may be asserted without fear of contradiction that lamb and mutton are independent of beef and pork price influence.

"Every factor has favored increased mutton consumption in recent years.

ern quotations, attracting shipments from Ohio and Michigan. Recently we have shipped entire trainloads of lambs from Detroit to Chicago. Every butcher shop in every town and hamlet in the Mississippi Valley now displays lamb and mutton, whereas less than a decade back it was rarely found. The public has acquired an unappeasable appetite for this wholesome meat. Medical men have extolled its merits, and its future is assured. A few years ago when the pack-

ers began a popularity campaign their task appeared formidable, and both time and effort were needed to eradicate prejudice.

"The market position of the grower has been rendered impregnable by increased consumption, and his own efforts to improve quality.

"Spreading the Western gathering season over a period of 6 or 7 months was a desirable innovation, and will do much toward eliminating complaint on account of erratic price swings. The current and prospective high prices for wool and skins, the inability of the packer to accumulate mutton during the season of excess production, and the depletion of flocks

to a stage that should cause concern regarding the future supply, are all influences warranting optimism of the emphatic variety. All the grower needs at this juncture is to acquire confidence in the permanency of present values. Skepticism on this subject may be difficult to dissipate, but the logic of the situation warrants it.

"Few people, even those in the trade, realize how dependent the nation is on a few Western states for its supply of lamb and mutton. Production



WHAT WILL THESE WASHINGTON LAMBS BRING IN JULY?

Breeders have improved quality, and the meat has been distributed in attractive form. Not many years ago, the bulk of sheep and lambs slaughtered in Chicago went to eastern cities, principally Boston, New York and Philadelphia, but recently developments have created an enormous demand at Western points, and Chicago has become one of the largest mutton-consuming points in the country. This will explain why, at frequent intervals, Chicago prices are higher than East-

east of the Missouri River does not exceed 25 per cent of the whole, and is available only at brief intervals. If a drouth, or some other calamity, should overtake such surplus-producing states as Idaho, Washington, Oregon, Montana, Wyoming, Utah, New Mexico and Nevada, we should speedily run into a famine. Not only do these states furnish the fat stock that goes into immediate consumption, but most of the thin sheep and lambs which are essential to feeding operations in Colorado, Nebraska, Kansas and the farming territory east of the Missouri River. In my opinion the Western flockmaster will continue to enjoy this practical monopoly. The hope of the consumer rests with settlers who are making homes all over the West, developing agriculture and producing rough feed that can only have a cash value through the medium of live stock. If they adopt sheep, wool and mutton production will expand, but not otherwise. No increase can be expected from the big outfit, which has seen its best day.

"Theoretically both wool and mutton production in the United States has unlimited possibilities, but in practice it does not work out that way. In the West the contraction of range and predatory animals restrict expansion of the industry. In the middle West and East dogs and the element of care are handicaps. If sheep could be run within fenced pastures in the West, flocks would multiply, but the necessity of herding as a means of protection against wild animals is a permanent obstacle, and between dogs and neglect the average farm flock proves a poor investment. Take Kentucky and Tennessee, for instance. For years the lamb crop from both states has realized lucrative prices, and yet each succeeding crop diminishes—a refutation of the axiom that high prices stimulate production, and the only possible solution of the puzzle is that the sheep cannot compete with the dog.

"I do not believe that the East will reinstate sheep in sufficient numbers to make materially lower prices possible. Of the practicability of the farm flock

I am skeptical, excepting in a few instances where the farmer is a shepherd—a qualification few Americans possess. The average farmer has handled cattle and hogs from boyhood, but when, in a fit of enthusiasm, he adopts sheep he usually finds that his lack of experience means failure. A few profit by their mistakes, and persevering, achieve success, but the majority drop out in disgust. Even in the sphere of finishing Western sheep and lambs in the farm feedlot, many score failure at the first attempt.

"The world's wool stocks are depleted before the next clip is ready, and manufacturers are eating into the visible supply in a manner calculated to cause apprehension of a bare spot. Wool substitutes have gone to a premium, and war waste is enormous. Whenever a British soldier leaves the trenches for a respite his uniform is burned, and a new one handed him. War means wool waste without the possibility of salvage, and years will be required to make it up. Wool scarcity affords an assurance of lucrative returns on money invested in sheep for a long time to come.

"So far as mutton is concerned, the European war has had no influence. None has been exported; imports have been reduced materially, but this would have happened in any case, as Australia has been practically put out of the mutton business by a long and disastrous drouth, the effects of which will not be readily repaired. Even if Europe went on a peace basis, I doubt whether we should feel Australian competition for several years. In Argentina there has been some increase in flocks, but the world's shortage of both wool and mutton is sufficient to assure continuance of remunerative prices.

"In one respect 1915 witnessed a trade revolution. The range season was doubled in length, and the Western flockmaster, instead of crowding his lamb crop into the market hopper during August, September and October, spread the run over the June to December period. This resulted in the

avoidance of gluts and the stabilizing of prices, operating to the advantage of producer, packer and consumer alike. An erroneous impression exists that the packer is a beneficiary of market gluts; the reverse is the fact. When he is under the necessity of wrestling with a congested sheep market he must force the product into distributive channels, often at a sacrifice, only to be under the necessity, on the succeeding bare spot, of paying abnormally high prices. Such a well-distributed supply of sheep and lambs as reached the market in 1915 was to the distinct advantage of all concerned, and with lambing methods in the West changed this may be expected to continue.

"The production of both wool and mutton on this North American continent has dropped several laps behind consumption, and steadily is losing ground. Conditions were never better than last spring for an overproduction of lambs. Feed was plentiful and weather ideal for a large percentage, yet the crop was assimilated with surprising celerity at the highest prices ever registered. That such a healthy market was possible at the prices is astounding; it merely demonstrates the popularity of mutton, especially lamb, with the American people, coupled with their ability to buy it at prices that wore a prohibitive appearance. That the purchaser was able to go the price pace should reassure the producer of the permanency of the market."

#### COLORADO FED MANY EWES.

Marketmen have been given a surprise this winter by a liberal run of ewe stuff out of Colorado feed lots. A lot of them sold at \$7.75@8.00, and they were a bonanza to packers as without them heavy mutton would have been scarce. Days have elapsed without a full load of wethers showing up at any of the markets, and it looks as though the country is out of the wether business for keeps. At that the trade is able to get along with little heavy mutton.

J. E. P.



# The Boston Wool Market

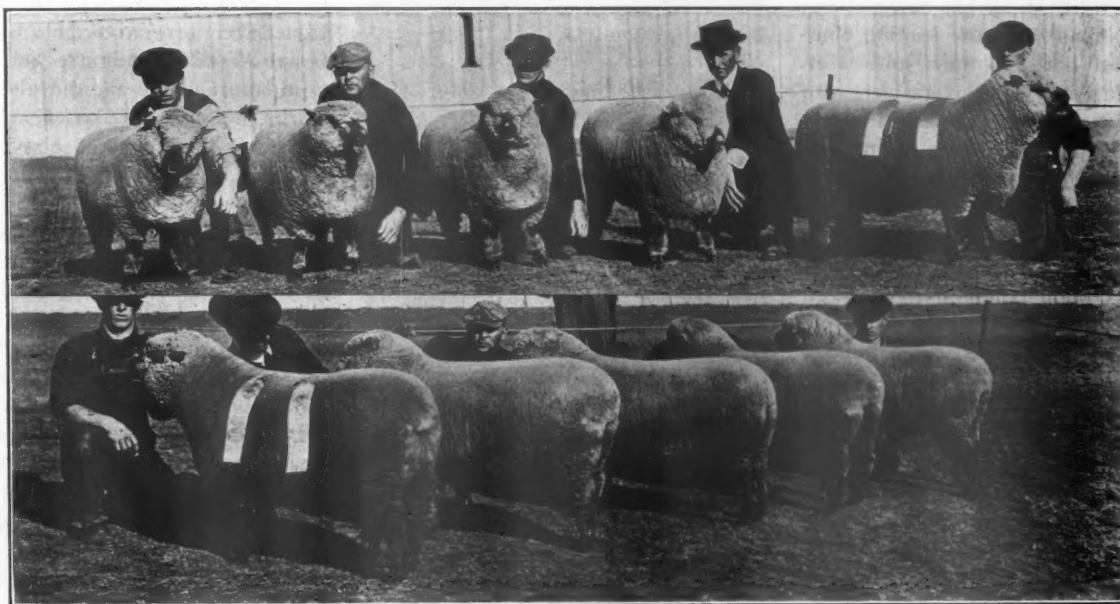
By OUR BOSTON CORRESPONDENT

HERE has been no lack of interesting features in the wool market of late, the salient feature of the happenings of the month being the gradual transfer of the centre of interest from foreign markets to the primary markets of the West. Eastern buyers were a little coy at first, and generally objected to paying the high prices demanded by the growers. Even now, with 10,000,000 to 12,000,000 pounds tied up on contract in various sections, most of the buying has been confined to a few houses. In

lion pounds, prices generally ranging from 28 to 30 cents. Medium clips are reported to have sold as high as 30 cents in the Triangle district, while in northern Utah as high as 28 cents has been paid. These prices seem to be about the high water mark for the early shorn wools. Recent contracts in southern Utah have been made at 25 to 25½ cents for the best clips, with heavier clips at 22 to 23 cents. Opening contracts were made in that section at 21 to 22 cents, but prices were quickly advanced. Nevada contracts have been

continue to advance, these early wools will look good, while if a turn in the other direction should come, there will be time enough to get in again and even up with later purchases. Further, the early shorn wools will come on a market comparatively bare of Territory wool, and will be likely to sell readily and at profitable prices. This has been worked out in several of the recent years, and has proved to be a "winner."

Some Eastern houses claim to have done little if any contracting thus far. They have been too busy attending to



TWO VIEWS OF THE CHAMPION SHROPSHIRE FLOCK AT THE PANAMA EXPOSITION, OWNED BY KNOLLIN & FINCH, SODA SPRINGS, IDAHO.

fact it is claimed that three houses, one each in Boston, Philadelphia and St. Louis, have secured the great bulk of the contracts. Most of the early contracting has been done in southern Utah, as is usually the case, but something has also been done in Nevada, northern Utah, Idaho, the Triangle district and Montana.

The highest price on record was paid at Dillon, Montana, late in February, one clip selling at 31¼ cents. Other purchases in that section brought the total well up to half a mil-

lion pounds, prices generally ranging from 28 to 30 cents. Medium clips are reported to have sold as high as 30 cents in the Triangle district, while in northern Utah as high as 28 cents has been paid. These prices seem to be about the high water mark for the early shorn wools. Recent contracts in southern Utah have been made at 25 to 25½ cents for the best clips, with heavier clips at 22 to 23 cents. Opening contracts were made in that section at 21 to 22 cents, but prices were quickly advanced. Nevada contracts have been

made on the basis of 21 to 23 cents. In most cases, buyers say that they know that the prices paid in the grease mean a scoured cost at or above a parity with this market. There seems to be a large element of speculation in this early contracting. Indeed, one larger operator is quoted as saying that he believes the best policy is to get in early, secure a liberal share of the early shorn wools, and then when competition becomes keen and prices advance sharply to withdraw from the field. If prices con-

tinued to advance, these early wools will look good, while if a turn in the other direction should come, there will be time enough to get in again and even up with later purchases. Further, the early shorn wools will come on a market comparatively bare of Territory wool, and will be likely to sell readily and at profitable prices. This has been worked out in several of the recent years, and has proved to be a "winner." Some Eastern houses claim to have done little if any contracting thus far. They have been too busy attending to

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in February, and had much complaint to make about the way they had been treated in regard to the shipment of the wools contracted or bought early in that Colony. There is still approximately 30,000 bales of unshipped belonging to Americans awaiting shipment at the New Zealand ports, and there seems to be little chance that permission will be given to ship to this country.

Sydney is the only market now holding public sales, and prices there are well sustained, though somewhat irregular on the poorer wools. Melbourne is now practically closed for the season, the latest cables indicating a firm market for good wools, but inferior wools were somewhat easier. England and Japan were the leading competitors at both Sydney and Melbourne, but American buyers were also active in the closing days at Melbourne. Top prices have been paid for good combing Merinos at both Sydney and Melbourne during February, in some cases said to be the highest on record. There has been a constant expectation that the embargo would be put in force again, on Merinos as well as on crossbreds, but up to the present writing, nothing of the kind has occurred.

Cape advices give 72 to 75 cents as the clean landed cost of good combing Merinos and 70 cents for short combing wools. South American markets are also extremely firm, though comparative few offers are coming from thence, Buenos Aires crossbreds are offered in a small way on the basis of 40 to 41 cents, cost and freight Boston or New York, for Lincolns and average quarters. Concordia 50s to 56s are offered at 48¾ cents, cost and freight, for wools shrinking 36 per cent. Montevideo wools are scarce, but a few offers are noted on the basis of 49 cents for 46s to 56s for wool shrinking 34 per cent.

In this market, heavy arrivals and big sales of foreign wool are noted as having taken place during the month. Large transfers of foreign wool have also been made to arrive, a large part of the various steamer cargoes being al-

ready credited to manufacturers' account before arrival. Frequent surprise is expressed by buyers as to the small supply of such wools available, even where two or three steamers are coming in weekly. Conditions in the goods trade are such that manufacturers are generally carrying six to eight months' supply of wool, where one to two months is the usual rule. For after all the real strength of the domestic situation is in the unexpectedly heavy demand for goods, rather than the high point to which foreign markets may have been advanced.

Actual sales are quoted during the month of 150 bales Buenos Aires high quarters at 43 to 44 cents, 400 bales Cape combing at 75 cents clean, 600 bales Australian at 26½ to 44 cents, 150 bales Buenos Aires crossbreds at 39 to 44 cents, 400 bales Australian at private term, 350,000 pounds New Zealand crossbreds at 40 to 46 cents, 600 bales scoured Capes at 65 cents for twelve-months' and 55 cents for short combing, 450 bales and 750 bags foreign Australian and foreign scoured at private terms, 2000 bales greasy Australian 64s at 78 to 82 cents clean, 200 bales Capes at 75 cents clean, 350,000 pounds New Zealand and South American crossbreds at private terms, 500 bales scoured Australians and Capes at 55 to 70 cents, 200,000 pounds New Zealand crossbreds at 41 to 46 cents, 1500 bales Adelaide 64s at 28 to 45 cents, or 82 cents clean, 100 bales short Capes at 62 cents clean, 150 bales carbonized Australian lambs' at 65 cents clean, 100 bales Montevideo 58s at 47 cents, or 78 cents clean, 150 bales snow white Capes at 63 cents, 50 bales scoured Australians at 70 cents, 750,000 pounds foreign wool, various grades, at private terms, and several hundred thousand pounds South American crossbreds at 39½ to 44 cents.

One interesting feature of the month, and one that caused some amusement in certain circles, resulted from the cabled announcement that the British Government had decided to put an embargo on East India wools, especially at the East India sale at Liverpool during the week of February 14. These

cables seem to have been received by a few houses only, and they at once took advantage of their earlier information to pick up all the available odd lots of Jorias, Vicaneers and Candahars. The buyers even went so far as to call up some of the owners at their homes after hours Saturday evening and secure options over the telephone. Prices advanced several cents a pound in a few hours, Jorias and Vicaneers going from 43 to 45 cents to 48 to 49 cents and Candahars from 38 to 39 cents to 45 cents. This little flurry seems to have subsided as rapidly as it begun, as it was entirely speculative buying on the part of dealers.

Considerable progress has been made in cleaning up remaining stocks of consigned Territory wool, held by the National Wool Warehouse and Storage Company and others, and also dealers' stocks, though the latter are few in number. The concern above named disposed of about 750,000 pounds original Montana wool 29 to 33½ cents, the scoured cost being estimated at 75 to 78 cents. Manufacturers are reported to be attracted by graded, tagged and baled lots, and are paying full price therefor. Actual sales other than the above have included 100,000 pounds Soda Springs quarter-blood 33 cents, 150,000 graded and 20,000 pounds original Territory at private terms, 125,000 pounds original Montana at 29 cents, or 73 to 74 cents clean, 125,000 pounds original Wyoming at 23½ to 26 cents, or 72 to 73 cents clean, 300,000 pounds fine Territory at 72 cents clean, 150,000 pounds original Montana at 30 cents, 50,000 pounds original Wyoming at 24 cents, or 72 cents clean, 60,000 pounds Colorado and New Mexico at 70 cents clean, 425,000 pounds Territory, various grades, at private terms, and 500,000 pounds, including original Montana at 30 to 32 cents, or 78 to 80 cents clean, and original Wyoming at 24 to 27 cents, or 77 to 78 cents clean.

Current quotations on Territory wools, scoured basis, are 78 to 80 cents for fine staple, 75 to 77 cents for half-blood staple, 70 to 73 cents for three-eighths-blood staple, 68 to 70 cents for



quarter-blood staple, 73 to 75 cents for fine clothing and 70 to 72 cents for fine medium clothing.

Scoured Territories have sold fairly well during the month, quotations at the close being 70 to 75 cents for fine white, 67 to 70 cents for fine medium and average fine, and down to 50 cents for stained and defective lots. The speculative fever in foreign scoureds seems to have subsided in a great measure, though sales are being steadily made at full prices. Pulled wools have been rather quiet for scoured, but greasy combings have sold well at 57 to 59 cents for fine, 55 to 57 cents for medium, and 52 to 53 cents for low. Eastern pullings are quoted scoured at 70 to 78 cents for extras and fine As 66 to 68 cents for A supers and 62 to 67 cents for Bs. Chicago pullings are selling slowly on the basis of 62 to 64 cents for A and 59 to 63 cents for B supers.

Ohio fleeces have developed strongly, and the best medium combing wools are now firmly held at 40 cents. Both quarter and three-eighths-blood have sold at 39 cents, and some holders announce that they have no more for sale at that figure. Delaine wools are also very strong at 37 to 38 cents for washed and 33 to 34 cents for unwashed. Fine unwashed clothing wools are held at 29 to 30 cents.

Total arrivals of wool at the port of Boston for the month of February, as compiled at the Boston Chamber of Commerce, were 60,666,351 pounds, including 17,757,188 pounds domestic and 42,909,163 pounds foreign. This compares with 27,556,664 pounds for February, 1915, of which 11,426,754 pounds were domestic and 16,129,910 pounds were foreign.

Shipments of wool for February were 32,473,188 pounds, compared with 20,483,832 pounds during February, 1915. Total shipments since January 1, 1916, have been 63,127,774 pounds, against 39,107,255 pounds for the same period in 1915.

The National Wool Growers Association wants \$5.00 from every Western sheepman; will you see that he pays this.

### WHAT TO DO WITH WOOL.

Last year wool and lambs sold at a high level; this year indications point to even better prices. Under such circumstances, growers are in better financial condition than for many years, even though the cost of production is advancing. While we believe that in good times the woolgrower should prepare for the inevitable rainy day, yet the sheep industry is in need of two reforms that should be attended to, one is a better preparation of wool for market; the other is the use of better rams. The rams may wait until



SCOURED WOOL STILL SHOWING THE PAINT BRAND.

fall, but now is the time to start reform of preparing wool in a better manner.

Our views upon wool preparation have only been reached after the most careful investigation, and they are not radical, nor will their operation entail but slight additional expense.

First, we believe that all clips should be graded at the shearing shed and all tags removed.

Second, the wool should be baled after it is graded.

Third, paint brands should be made as small as possible, and only soluble paints used.

For many years this paper has consistently urged grading the wool at the shed, and now that prices are good, growers should adopt this reform. Grading simply means the packing of each kind of fleece by itself, thus the fine wools would go into one lot, the half bloods in another, the three-eighths bloods in another, and so on. The National Wool Warehouse last year graded considerable wool in Wyoming, Nevada, and Montana with excellent results. We are advised that all who graded last year will grade again this year. We want to urge every member of the Warehouse to have that institution grade his wool into standard lines.

The most of our sheepmen are not members of the Warehouse, and it is to them that we speak in particular. At the present time many of the sheepmen do not know the different grades of wool. They may, here and there, be able to employ competent graders, and, where it is possible, should do so. However, in the absence of expert graders, the case is not hopeless, for most sheepmen know the grades of wool on their sheep. Therefore, the next best thing to do is to grade the sheep before shearing. The fine wools can be cut out and also the half bloods, the quarter bloods, the coarse wools, the bucks, and the blacks, and the wool from each class kept separate; then remove all tags and bale the wool. Such a procedure, of course, will only give a rough grade, but for all practical purposes it will answer.

A short time ago this was approximately the range of prices for wool in Boston:

Fine and fine-medium.....	26c
Half blood .....	29c
Quarter blood .....	33c
Braid .....	32c

These are only approximate prices, but they show a variation of 6 cents per pound. In nearly every Western clip all of these grades will be found. How, may we ask, can either the buyer or the seller estimate the value of a clip without knowing the amount of each grade present? Now, while we can afford it, is the time to make a move for the better.

## AN INDIANA EXPERIMENT.

Three investigators, Frank Kleinheinz of Wisconsin, W. C. Coffey of Illinois, and F. G. King of Indiana, are engaged in earnest efforts to stimulate wool and mutton production in the cornbelt. King has just finished at the Indiana Station at Purdue an experiment in feeding that will be of general interest. The lambs used were Mexicans, bought on the Denver market at \$8.00 per hundred weight last October. Going into the feed lot, cost was \$8.85 per hundredweight, and the selling price, February 16, at Chicago, was \$11.50 per hundredweight. Various combinations of rations were tried, the greatest profit being made with shelled corn, cotton seed meal, clover hay, and alfalfa. The detail of the test is given in the following table:

LAMB FEEDING EXPERIMENT, OCT. 28, 1915, TO FEB. 5, 1916, (100 DAYS).

RATION.	Lot 1: Shelled corn, cottonseed meal, corn silage.	Lot 2: Shelled corn, cottonseed meal, molasses, clover hay, corn silage.	Lot 3: Shelled corn, clover hay.	Lot 4: Shelled corn, alfalfa hay.	Lot 5: Shelled corn, oat straw, cottonseed meal, corn silage.	Lot 6: Shelled corn, clover hay, corn silage.	Lot 7: Shelled corn, cottonseed meal, clover hay, corn silage.	Lot 8: Shelled corn, ground soybeans, clover hay, corn silage.	Lot 9: Shelled corn, clover hay, corn silage. (In barn.)
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
Av. initial wt. ....	56.1	56.2	56.4	56.1	56.1	56.3	56.0	56.2	56.2
Av. final wt. ....	73.0	82.2	80.6	82.2	73.2	81.0	81.8	80.8	80.4
Gain per lamb.....	16.9	26.0	24.2	26.1	17.1	24.7	25.8	24.6	24.2
Average daily feed—									
Grain . . . . .	.96	1.02	1.01	1.01	1.00	1.00	1.01	1.01	1.00
Hay . . . . .	.10	1.19	1.82	1.70	.63	1.17	1.17	1.16	1.17
Silage . . . . .	1.88	1.12	....	....	1.27	1.12	1.12	1.12	1.09
Cost per cwt., gain.....	\$9.10	\$8.33	\$8.68	\$7.78	\$9.10	\$7.94	\$8.02	\$8.37	\$8.09
Selling price in									
Chicago . . . . .	10.65	11.00	10.80	11.35	10.25	10.90	11.50	11.25	10.90
Profit per head.....	.76	1.33	1.05	1.76	.47	1.32	1.82	1.50	1.27

Twenty-five lambs in each lot. Initial cost of lambs in the lots, \$8.85. Sixty cents per hundred pounds are deducted from the Chicago valuation in order to get selling value in the feed lots. The following prices are used for feeds: Corn, 56 cents; oats, 32 cents; cottonseed meal and ground soybeans, \$38.00 per ton; molasses, \$30.00 per ton; oat straw, \$5.00 per ton; clover and alfalfa hay, \$12.00 per ton; corn silage, \$4.50 per ton.

Said Professor King in discussing the experiment: "Our greater profit was made with a ration of shelled corn, cottonseed meal, clover-hay, and corn silage. In five out of six trials this result has been reached, and I believe it to be one of the best rations for fattening lambs.

"Where corn silage was the only roughage used in connection with cottonseed meal and corn, we have concluded that such a ration does not produce satisfactory gains and that it is impossible to keep lambs on feed and thrifty. We are convinced that some leguminous hay is necessary in a ration for fattening lambs.

"This is the first time we have fed molasses, and a single trial does not warrant definite conclusions."

## FROM ESCALANTE, UTAH.

Up to the present time the sheep have wintered in good condition. The winter range is fairly good, and we have had plenty of snow for sheep to do well. Prospects are bright for a good winter, and a good wool clip, as the sheep are in good condition and the

out the advice given in the preparation of our wool clips, etc., we would be benefited by it. D. J. Spencer, Utah.

## COLORADOS WILL BE IN EARLY

At the beginning of March, it was estimated that fifty per cent of the sheep and lambs in Colorado feed lots had been run. This has never happened before and was due to high prices, cost of feed and the fact that Colorado feeders were apprehensive of putting on excessive weight. Elsewhere February liquidation was general for the same reasons, few remaining in feed lots around Chicago at the middle of March. J. E. P.

## ARE OPTIMISTIC IN WYOMING.

"Wyoming sheepmen are in good fettle," said D. D. Cutler, general livestock agent of the Chicago and Northwestern road. "They are coming through the winter in excellent condition, are getting bids of 25 to 30 cents for their wool, and are confident of the highest prices on record for lambs. Already Colorado operations are offering to make contracts at \$7.00 for lambs for delivery next fall."

## WETHERS SELL AT A PREMIUM

Owing to scarcity of wethers that class of stock has been selling at a premium of 50 cents per hundredweight above ewes. Product of female stock has been generally substituted for that of wethers, but some people in the trade cannot be fooled. Packers were unable to put away any frozen wether carcasses in their coolers last summer and fall and have been on a hand-to-mouth basis all winter.

## A CORRECTION.

In the February Wool Grower, in the report on the wool clip of Williams and Pauley, we stated that their clip had recently sold at 27½ cents and that their best offer at shearing time was 25 cents. We are now advised that 27¼ cents was offered at shearing time, and therefore, we make this correction.

wool is growing nicely.

There are opportunities for a few new beginners each year, but not many. I don't know of any sheep for sale at the present time.

I greatly appreciate the National Wool Grower, and believe if the growers would all take it and then follow



# Type of Ewe Best Suited to California

By RALPH E. GUSCETTI

CONDITIONS as to soil, altitude, feed, climate and mountainous or valley vary to a great extent, I might say to nearly either extreme, in California, and of course I shall not insist that one and the same breed or type of sheep would be the ideal and best adapted to all parts of the state. It must be realized that California is a large state especially in longitudinal area and that conditions in the northern part differ greatly from those of the southern portion, as also do conditions along the coast differ from those of the Sierras or eastern part with its higher valleys and mountainous ranges, therefore the type or breed of sheep best suited to the eastern or range area may not in all cases be the most suitable or most profitable to breed in the western or coast portion with its low altitude, long rainy season and intensively cultivated and farmed region.

Still we have proof that one type and breed of sheep which we in the West know as the smooth Merino, is as well suited and as profitable near the Pacific Coast as over the range area, in timbered regions and on dry, denuded ranges.

In the Coast valleys we find of the mutton breeds on the farms the Shropshires predominate and some are even ranged in bands, but by far the greatest number considering the state as a whole and really the best suited to the California ranges, and certainly well adapted to valley farms and meadows, are the smooth Merinos.

This type of ewe may be described as a large sheep, of good weight, wide, round back, well sprung ribs, broad girth, deep body, medium long legs, well set, and well woolled over all parts down to above the eyes, and well down on the legs, wool length on shoulders about three inches, with plenty of fine wool on belly, and not coarse on flanks or britch.

These ewes are generally free of folds or wrinkles over the body, but with a horseshoe shaped wrinkle over

the root of the tail or dock and three or four large wrinkles around the under part of the neck, lessening as they go up to very small or almost invisible wrinkles on the top of the neck.

Their wool grades fine medium, as

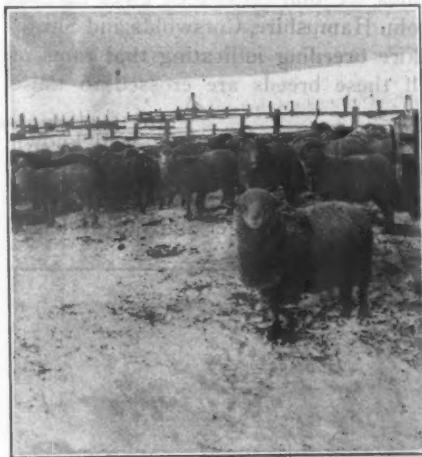


PLATE I.

an average, some being even finer. But their length of wool is usually so good as to make it a very ideal combing wool.



PLATE II.

This type of ewe shears eight to twelve pounds for ordinary range ewes and from ten to twenty-five pounds from registered flocks.

Plate 1. The ewe standing forward, is of such type. This ewe, range raised,

weighs about 140 pounds and clips ten pounds or over of fine white wool entirely free from yellow grease, which is very important.

This type of ewe bred to mutton—breed rams of either Lincoln, Hampshire or Shropshire breed, will produce an ideal mutton lamb of quick growth and very good fattening quality, besides, this lamb will yield a large, well woolled and heavy pelt.

Such lamb is easily maintained and under ordinary range condition is in prime marketing shape at four months old.

Plate 2. The ewe, looking toward photographer, is a young ewe, smooth over body, with neck folds. This ewe is not so well woolled as ewe in Plate 1, but her wool will be about four and one-half inches in length at twelve months' growth. It is fine, strong fiber, free from yellow grease and clips around nine pounds. This type of ewe is very well suited to either farm or range.

On Plat 2, the ewe standing just ahead of the young ewe described above, is another ewe of good type.

This type of ewe is not a new breed nor is it a cross-bred. But they are the native Merino ewe, bred to smooth rams, with heavy, dense, even and very fine wool, of good length with an even and free flow of white oil, fine even crimps and white surface, with smooth, even wool cover over body, belly and legs, wrinkles on neck and at tail root.

However, there are ewes of this type which are pure bred and registered, such as the smooth type of Rambouillets and rams of this type are crossed or rather bred to native Merinos.

This native Merino ewe is a very strong, hardy and long lived sheep. They are direct descendants of the old Spanish Merinos, which have from the early days of Spain's occupancy of the West and Southwest, been the ideal sheep for the West, but being a small ewe, covered with numerous large

wrinkles and not very profitable as mutton, yet very profitable wool producers.

Today, however, the increasing demand for mutton and low wool prices of the past few years has brought on a demand to supply various markets with choice mutton, causing sheepmen to turn to a dual purpose or wool-mutton sheep. And sheepmen who are permanent in business will agree that this smooth Merino is the ideal ewe.

The good points of this ewe are their easy, and quiet herding habits, there being seldom any cuts or strays from a band, as they do not require a great amount of feed; they do not travel as far to obtain their fill. Owing to their dense, strong wool, seldom any is pulled off their sides and bellies by brush and shrubbery, this dense and oily covering also serves as an effective protection against cold and severe storms, a fact very noticeable soon after shearing.

They are good, true breeders, usually dropping single lambs which are preferable in range flocks.

Such ewes raise their lambs well, strong and large, always fat and easily maintained fat, even on rather scant ranges.

Their habit of leaving the bed ground early in the morning, thus getting dew with the grass and their quiet movements while grazing, do not create much thirst so they do not need to be trailed to water as often.

They browse considerable on brush and shrubs when other feed is scant and maintain in good condition during longer periods.

The true breeding qualities of these ewes produce even and uniform lambs, a fact appreciated by breeders and butchers alike.

This ewe bred to Hampshire rams, produces a very good mutton lamb, possessing ideal mutton form and quality, with a good fleece. Plate 3 is of such a cross.

The smooth Merino ewe bred to Lincoln rams produces, perhaps, the best adapted (next to the dams) to range or farm conditions in California. These cross-bred Merino-Lincoln lambs pos-

sess nearly all of the good qualities of their dams, and are often retained in the band as breeding ewes, being in turn bred to Lincoln rams; their offspring is a very excellent mutton lamb.

This cross-bred ewe is hardy, large size and a good rustler, produces large lambs and clips a large fleece of medium coarse wool.

Among range bands of smooth Merinos we find cross-bred ewes of Lincoln, Hampshire, Cotswolds and Shropshire breeding indicating that rams of all these breeds are crossed to these ewes.

In central California a well known breeder maintains a large flock of this type of sheep; being well cared for they are much larger and shear a heav-



PLATE III.

ier fleece than do the range ewes, but in type they are very near alike.

In conclusion, I wish to state that not only the Merino does well here but all common breeds seem to readily adapt themselves to our climate and conditions, but the smooth Merino as described is the best suited, all considered, to California.

I do not favor any one particular breed and believe that all are well suited to some locality and certainly all are very useful.

#### FROM OZONA, TEXAS.

We find range conditions in this particular locality not so favorable as at

this time last year. We are in the midst of a continued drouth. The first of March finds us with no prospects of any green feed for lambing ewes.

The greater part of the sheep in this country are being fed. Some are feeding cottonseed cake, and other are feeding soto. Our sheep have all held up remarkably well under conditions with which they have had to contend.

Quite a good many are lambing now and find that after lambing the ewes are improving some.

The growth of wool has been very backward. However, I believe that if we have any spring feed, by feeding as we are, the clip will be as good as it was a year ago. There are more sheep in the country than at this time, 1915.

Wolves did a great deal of damage through the summer and fall, but do not seem to be so numerous now. Most of the ranchmen are working after them. The Government trappers are also doing a wonderful lot of good in this section.

E. N. STUBBLEFIELD, Texas.

#### FOREIGN MUTTON

##### HARD TO SELL

Considerable South American mutton has entered the New York gateway during the past two months, but it has not found favor with American consumers. Swift has imported most of it.

"The foreign stuff does not take well with American mutton eaters," said a distributor. "We were unable to unload the entire jag on the New York market and sent fully 50 per cent into the interior, but everywhere retailers frowned on it. American packers have put up domestic sheep and lamb carcasses in attractive shape, and the imported article looks bad by comparison. We were under the necessity of sending some of it as far west as Omaha to find an outlet."

Remember the Ram Show and sale will be held in Salt Lake City, August 30 to 31, and September 1 to 2. Nothing will happen to prevent this sale and you should attend.

# SHIP YOUR PEELTS, HIDES and FURS

## To Utah Hide & Livestock Co.

[Established 1891]

Salt Lake City, Utah.

Whether You Ship a Dozen Skins or a Carload You Will Receive

**Market Prices      Liberal Grading**

**Prompt Returns**

Quotations and Shipping Tags on Request



# Do Your Shearing with

Take the wool off evenly and quickly. Get a long even hat buyers. Any of the **Stewart** machines shown here

## Stewart No. 9 Hand Operated Machine Ball Bearing

For Flocks up to 200



This machine has a substantial fly wheel enclosed in the gear case. That facilitates the easy turning. The gears are all cut (not cast) from the solid steel bar and are file hard. They are enclosed, protected and run in oil. Every point of friction is fitted with ball bearings. That contributes much to the easy running and long life of the machine. The shearing head is also ball bearing throughout.



Send us \$2.00 and we will ship C. O. D. for balance, or remit in full, as you prefer. If the machine doesn't please you in every way, return it inside 30 days and we will send your money back, including transportation charges. If you haven't sheared yet, send for one of these machines today and see what real satisfaction there is in this splendid machine.

The price all complete as described is only \$11.50, which includes four sets of knives.

## Stewart Little Major Shearing Machine

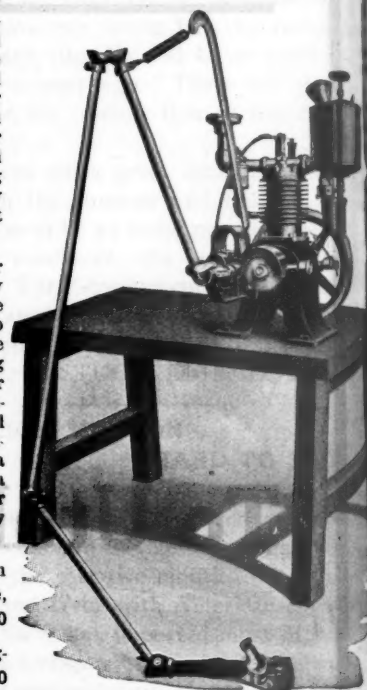
For Flocks from 200 to 1500

This illustrates the Stewart Little Major Gasoline Motor equipped with our attachment for shearing sheep and goats. The shear can be started or stopped, connected or disconnected while motor runs. A stout spring on clutch bracket either holds or releases clutch—just a pull of the first section of tubing outward, or push inward by shearer. Fitted with latest No. 12 Stewart shear.

As a complete single power unit—warranted to clip any wool or mohair grown—the Stewart Little Major Sheep and Goat Shearing Machine fills a long felt want among those owners who consider hand power machines inadequate for their bands, and who have no available engine to spare for driving a power machine. It is also a boon for the custom shearer by reason of its simplicity and light weight—90 pounds.

Price, complete as shown with battery without table, f. o. b. Chicago.....\$50.00

With high tension magneto.....\$60.00



## What Users Say

McAndrews (via Mack), Col., July 20, 1914.  
In 1909 I installed a new Stewart Machine sheep shearing plant consisting of only six machines, and have since then enlarged it to a fifteen machine plant. After five years' experience with the plant I am pleased to state that the Stewart Sheep Shearing Machinery has proven satisfactory in every respect.

R. A. TANNEY.

Winfield, Iowa, Aug. 6, 1914.  
The Sheep Shearing Machine No. 9 with horse clipper attachment is all that it could be.

E. ENKE.

Joliet, Ill., July 14, 1914.  
We now have our shearing plant equipped with eight Stewart Machines, which are uniformly giving good service.

The perfection of the New Stewart Machine has placed the responsibility for the quality and quantity of work done entirely upon the operator. We could not ask more from them.

MILLSDALE SHEEP FEEDING YARDS,  
A. J. MILLS, Manager.

I am well pleased with your machine and think it a great labor saving device, besides doing a great deal better work than can be done by hand.

J. L. LITTLEFIELD.

Hansell, Ia., August 12, 1914.  
Have used one of your power machines for three years. It is all one could expect in its line.

WM. R. HELD.

Farmington, N. H., July 14, 1914.  
I am very much pleased with the Stewart Sheep Shearing Machine which I purchased from you about three years ago. It also does good work and I found it will do what you claim.

FRANK H. DOW.

Los Banos, Cal., July 25, 1914.  
I have tried your Little Wonder Shearing Machine and it is proving very satisfactory. You will please ship me one just the same kind. Please ship as soon as possible. I want to use it right away.

W. W. WRIGHT.

Darlington, Wis., July 15, 1914.  
We have used your Stewart Sheep Shearing Machine for several years and believe no other machine could do better work.

Send your order now for a machine suitable for  
**Chicago Flexible Shaft Company**

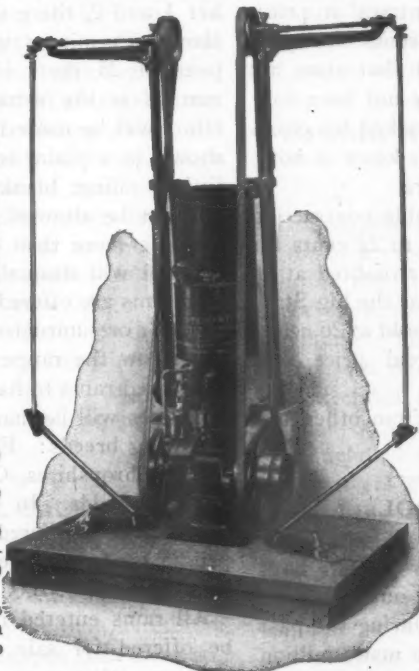
# Easy and Comfort This Year

What will bring the most from  
your flock for you. **Order Now.**

## Stewart Little Wonder Power Shearing Outfit

For Flocks from 1500 to 5000

is an exceptionally  
power outfit for own-  
flocks ranging from  
5000. It consists of a  
made two-horse power  
type, gasoline  
two Stewart shears,  
working independently,  
grinder. The whole  
combined in one machine  
can be easily moved  
from place to place by  
men, or carried in a  
It is just the thing  
for shearers who wish to  
about from flock to  
during the shearing



### Price.

Stewart "Little Won-  
including en-  
two shears,  
batteries,  
tanks and  
.....\$100.00  
Combs at 50  
each ..... 6.00  
Cutters at 15  
each ..... 3.60

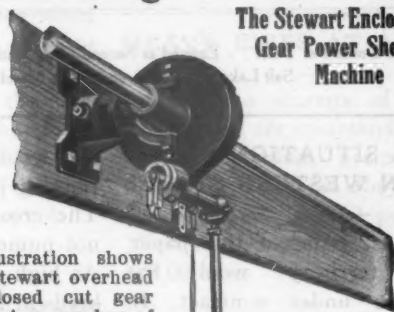
Complete .....\$109.60

Stewart "Little Won-  
fitted with a Magneto-  
ment if desired at an  
additional cost of \$10.00 to  
list.

Write for catalog of this and other power Shearing Machines.

## For the Large Flock Owner

The Stewart Enclosed Cut  
Gear Power Shearing  
Machine



This illustration shows  
a single Stewart overhead  
type, enclosed cut gear  
machine. Any number of  
these may be operated on  
one line shaft.

Every moving part is  
securely enclosed in a  
metal case where it runs  
in oil protected from dust  
and dirt.

This machine runs ab-  
solutely without thrust.  
The action is positive and  
there is no lost motion.

No friction wheels to  
slip or leather to get oil  
soaked or spongy.

Runs on slow line shaft  
with speed of about 450  
revolutions per minute.

Price per unit, \$50.00.

Write for  
special catalog  
and prices on  
complete  
plants.



## Stewart Machines:

July 14, I am well satisfied with our investment;  
with the Stewart way is the only way  
which I would permit our sheep to be shorn.  
ago, I also now using your horse clipper at-  
tached to the line shaft, which more than paid for itself  
in one year.

GEO. D. PARKINSON & SON.

July 25, I have used your Little Wonder Sheep  
Shearing Machine for five successive years,  
and it has been a complete success. No man who  
rightly knows how to shear can make a mistake in  
using one of the Stewart Sheep Shearing  
Machines. I am putting in a water pump to  
run with it. I would like you to send me  
a line shaft and all that I would  
need to run four of the Stewart shears.

E. B. SYPHER.

Monticello, Ill., August 1, 1914.  
The "Little Wonder" Stewart Sheep Shear-  
ing Machine is truly a little wonder. Plenty  
of power, speed and a splendid machine.

FRANK O. DILATUSH.

Sterling City, Tex., July 28, 1914.  
Some time ago I purchased a Stewart  
Sheep Shearing Machine from you and used  
it for two seasons, and its work was entire-  
ly satisfactory. I think the machine the best  
I have ever seen.

A. A. GAMBLE.

Carpenter, S. D., July 3, 1914.  
I have used a Stewart No. 9 Shearing Ma-  
chine for four years and it works as good  
as new yet. The machine shears clean and  
runs easy. I had never seen a machine work

until I got this one and can shear a sheep  
in four minutes now.

W. L. MERRIMAN.

Fowlerville, Mich., July 26, 1914.  
I have used one of your Little Wonder  
Shearing Machines for five seasons and there  
is no better. I shear thousands of sheep  
every year. After shearing I use my engine  
for pumping water.

WM. WENDEL.

Breedlove, W. V., July 15, 1914.  
We bought one of your Stewart Sheep  
Shearing Machines about three years ago. We  
like it; runs easy, and does good work. We  
have never seen its equal anywhere.

JACOB AND JULIUS SLAUBAUGH.

Write for our flock or write for new 1915 Catalogue

596 LaSalle Avenue

CHICAGO

# The National Wool Grower

Published Monthly by the National Wool Growers' Association Company  
(Incorporated)

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Edited by the Secretary

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## THE WOOL SITUATION IN WESTERN STATES

Since the last issue of this paper, considerable territory wool has changed hands under contract. In Utah, we should say about eleven million pounds have been contracted at prices ranging from 20 to 28 cents.

In Wyoming, not much has been done in the way of contracting but many offers have been made. In the central part of the state a few clips have sold at 25 cents. In the Cokeville section, as high as 30 cents has been offered for low crossbreds, but we know of nothing selling.

In Beaverhead county, Montana, much of the wool has been contracted at prices ranging from 29 to 31 cents. The clip of Senator Selway has sold at 31 cents and at least one other clip at the same price. Both of these clips contain considerable Hampshire wool. Around Dillon, the going price for crossbred has been 30 cents. Outside of Beaverhead county, we believe but little wool has been contracted, and few offers made in Montana.

In Idaho, probably three million pounds have been contracted. In the vicinity of Boise, several clips have sold at 25 cents, and offers as high as 27 cents have been refused in the same section. In eastern Idaho, 30 cents is the going price, and several clips have moved at that figure. The largest clip in the United States, that of the Wood Livestock Company, has been contracted at a figure reported above 30 cents.

In Nevada, probably 70 per cent of

the wool is under contract at prices ranging from 19 to 24 cents for fine. The crossbred clips of that state are not numerous and have not been sold. As high as 30 cents is asked for crossbreds in Nevada, but we know of nothing selling at that figure.

In Oregon, considerable contracting is going on at from 20 to 22 cents for heavy fine and a little crossbred at 26 cents. It is reported that the big Stanfield crossbred clip has sold at 26 cents, but many believe the real price was considerably higher.

We have no reports from other sections.

## BALED WOOL.

During the past two weeks we have had many letters asking our judgment regarding baled wool. During the past thirty days we have seen many million pounds of both baled and sacked wool. Frankly, we want to state that in appearance wool that has been baled looks just as much better than wool that has been sacked, as the outside of the wool bale looks better than the outside of the wool sack, and that is a pretty big difference. For some reason that we do not understand, baled wool opens up brighter than sacked wool. In appearance alone baled wool would sell more readily than sacked wool. In addition to the appearance, it is more easily handled, takes less storage room, and moves at a lower freight rate.

While we believe that baled wool has every advantage over sacked wool, yet we should not advise baling unless the grower is willing to remove all the tags

from his fleeces, and either grade the wool after it is shorn, or the sheep before shearing. When wool is baled after the sheep have been graded, it should be tied with paper string so that it can be better handled by the dealer, but where it has been graded by an expert grader, it does not require tying for it is ready to go to the mill.

## RAM SHOW.

At the Ram Sale in Salt Lake City, Utah, August 30 and 31 and September 1 and 2, there will be held a ram show. Premiums will be offered for pens of 25 rams instead of for one ram as is the usual custom. Every effort will be made to have these rams shown in a plain, sensible way; overfitting, oiling, blanketing, or coloring will not be allowed. Any ram shown carrying more than one year's growth of wool will disqualify the pen. The premiums are offered for purebred registered or unregistered rams. This will allow the range breeder with unregistered rams to have a show.

Classes will be made for each of the following breeds: Fine wools, Hampshires, Shropshires, Oxfords, Lincolns, and Cotswolds. In each class, premiums will be offered as follows: Best pen 25 rams, any age, \$100.00; second, \$75.00; third, \$50.00.

All rams entered in the show must be offered for sale under the same terms as other rams.

## THAT PAINT BRAND.

In going through a wool loft the other day, the man in charge pointed to an excellent Montana clip and said, "A wool buyer from New Jersey from a mill that uses mostly Australian wool would have bought that clip the other day, but when he saw the paint brand, he would have nothing to do with it."

Probably the worst feature of American wool is the paint that is used on it, and it is something that will be difficult to correct. In this country all sheep must be branded, and branded well, otherwise heavy losses may occur. But even if this is true, we can



do away with the use of excessive quantities of paint, and nearly every one can use the soluble paints advertised in this paper. There is no occasion for many of the big brands that are used, and branding in two or three different places can be entirely eliminated. As a rule our sheep are carelessly branded; frequently the most reckless employee on the ranch is allowed to do the branding, when as a matter of necessity a very careful man should do this work. Then, around most of our ranches a half dozen cans of different branding paints can be found, some of which are soluble, and some not, but all of which are used throughout the year. We should throw out all these old branding paints and stock the camps with soluble paint so that nothing else can be used. We understand that soluble paints last only about six months, but most growers brand twice a year anyhow, so this is not a serious objection.

Many of the best sheepmen in the Intermountain country have been using these soluble brands for three years, and their clips are gaining in reputation with the mills.

### WOOL SACKS.

We have advice from several sources to the effect that wool sacks are to be much dearer this year than heretofore, and it may even happen that there will not be enough to go around. Several steamers laden with bagging have been sunk, and large stores of jute and burlap are lying on the docks in India for lack of vessels to transport them. Under such circumstances, the grower who buys his sacks early may be ahead.

### TO SELL OR NOT TO SELL.

Naturally at this season we are being deluged with letters asking whether to sell or not to sell some particular clip on which an offer has been made. And just as naturally, we must refuse to give advice of this kind.

In the first place no one could tell the value of a clip without knowing the grades of wool that it contained,

the length of staple and the shrinkage. These are the absent factors when dealing with Western wools, unless the wools have been carefully graded the year before, and this has seldom been done.

Woolgrowers must understand that the present values are largely a result of the war, and of how long the war is to continue or what will happen when it ends, one man's judgment is about as good as another's.

In these pages we will give the facts about wool conditions and the prices that are being paid. The woolgrower must determine for himself when to sell, or to whom to ship his wool.

### WYOMING WOOL-GROWERS MEET

On another page of this paper will be found a report of the annual meeting of the Wyoming Woolgrowers' Association, recently held at Casper, Wyoming. This meeting was a very enthusiastic one, and was probably the best attended meeting that Wyoming has had for many years. The attendance included most of the progressive woolgrowers of the State of Wyoming, and the interest manifested in the Association can only mean that the sheepmen of that state have decided to make their organization what it ought to be in the greatest sheep state in the Union.

At the close of the convention, Dr. J. M. Wilson, of Douglas, Wyoming, who is so well known to all members of the National Wool Growers' Association, was elected president of the Wyoming Association. We want to congratulate the sheepmen of the State of Wyoming upon the selection of Dr. Wilson as their president. He has long been one of the most untiring and useful workers connected with Wyoming sheep affairs. He is one of the biggest and ablest men in the Western United States, and he is entitled to the support of every woolgrower in the State of Wyoming. We want to urge the sheepmen of that state to get behind Dr. Wilson and the Wyoming Woolgrowers' Association and to make their

organization the best and strongest state woolgrowers' association in the United States. Wyoming is the leading sheep state in the Union and its president is one of the leading citizens of this Western country. Therefore, there is every reason why it should have the enthusiastic support of every woolgrower in Wyoming.

### HEAVY EWES AT A PREMIUM.

Owing to scarcity of wethers, big native ewes are commanding a substantial and unusual premium, due to weight and fleece. They have been selling at \$8.25@8.50 per cwt., while Western product has been on a \$7.50@8.00 basis.

J. E. P.

### A SMALL NATIVE LAMB CROP.

The 1916 lamb crop in the farming area east of the Missouri River will be the smallest since away back in the primitive days of the industry.

Few ewes went back to the country in 1915, while female stock went to the shambles by the hundred-thousands. Even in Kentucky and Tennessee, there are no more than a year ago. In Wisconsin, Iowa, Minnesota, Illinois, Michigan and Indiana, sheep are scarce and wool buyers say a sizeable package of that commodity is hard to find. Western growers will have even less competition from native lambs this year than in 1915.

J. E. P.

### "FOOT AND MOUTH" SITUATION

Within the past month, the foot and mouth disease situation east of the Missouri River has materially improved. A sporadic outbreak in Christian county, Illinois, has been the only handicap to removing all restriction to interstate traffic in breeding and stock cattle and sheep. The Federal Government has opened the stocker outlet at Chicago and on March first, Michigan, New York, Pennsylvania, and Ohio were receiving shipments through that gateway. Should no other outbreaks occur, all restrictions will be removed by April first.

## "Our Remaining Public Lands"

Address of MR. DWIGHT B. HEARD, Phoenix, Arizona, President American National Live Stock Association, at the National Wool Growers' Convention, Saturday, January 15, 1916.

**A**LTHOUGH a cattleman, I can assure you that it is indeed a very great pleasure for me not only to meet with the members of this great convention, but it is a special pleasure for me to be permitted to extend to you the hand of fellowship on behalf of your sister association, the American National Live Stock Association.

There have been days in the past when sometimes we have not had the kindly feeling that exists today between the cattleman and the sheepman. I remember when I first came to Arizona twenty-one years ago, a cattleman who came around to a convention or meeting of sheepmen was looked upon with suspicion, and there were occasions when he was asked to leave his weapons outside. I am glad to say that those days are past and thank God it is so.

I have seen many evidences in the last few years of the value of organized work. It has been my pleasure on many occasions to see the tremendously effective work that has been done by your very able Secretary, Dr. McClure. We have worked with him and we have found him to be all wool and a yard wide, and more than that, an allround efficient man.

Speaking about a real man, I was reading a little while ago something that I think I can relate here. It was from the "Simple Life" by Wagner. He said:

Don't be a fox,  
Don't be a hare,  
Don't be a hog,  
Don't be a hawk, or  
A bird of prey,  
Just be a man.

and I want to tell you, my friends, there is a great deal in that idea.

Now talking about organization; organization pays these days. The other day I heard a story which I think I can properly relate at this time. The scene was in a small southern town and the principal citizen of the town, honored by the name of Judge, (sometime I

suppose he had been Justice of the Peace), was going down the principal street when he saw an old darkey teamster who was noted for what he could do with a blacksnake whip. The judge said, "Well Sam, I understand you are a great man with the whip, and that you can do most anything with a whip." "Yessa, I is a pretty good hand with a whip," answered Sam. "Well, Sam, I would like to have you show me what you can do with the whip?" said the judge. "See that fly out there on



MR. DWIGHT B. HEARD.

the fence? Can you get that fly there, Sam?" "Yessa." He cracked his whip and flipped the fly.

The judge saw one of those big darned needles flying in the air. "Well, Sam," he said, "Can you get that darned needle?" Same took his whip and got the darned needle. The judge looked up and saw fastened to the eaves of one of the buildings a hornet's nest, and said, "Sam, do you suppose you can get that hornet's nest." Sam answered, "What you tak dis da'key fo' judge, dey's ho'nets, an' dey's o'ganized."

Now my friends, organization pays. I have, however, not come to talk to you about organization; I have come to talk to you about the cattle and sheepmen of the West today, their relations to the public lands and how we can arrange such methods for better control of the public grazing lands of the West as to make those lands produce more stock to a given area. I believe this is one of the vital questions of today. It is of national size and the need of its just solution is being constantly proved. When we consider that in the area involved there are today 280 million acres of land, practically one-sixth of the area of the United States not including Alaska, the Philippines or Hawaii; when you realize from a comparative standpoint that that area is equal to the combined areas of Germany, France and Belgium, you begin to realize how big a question this is.

According to the latest figures that have been furnished me there are now sixteen million sheep grazing on the public domain in thirteen western states; a fact which shows why the solution of this question is of such tremendously vital importance to your own industry.

I am going to read you some facts. Figures as a general rule are rather dull things but they are also convincing. I am not going to bore you with too many but a few I am sure will prove of interest. The last statistics which I have been able to get show that the number of sheep in the United States is approximately 35 million, and of this number about 60 per cent are located in the twelve western grazing states, in which states are located 99 per cent of all the unreserved, unappropriated lands of the country, you can, therefore, appreciate my friends, that it is a mighty important question from the standpoint of your own industry, how intelligently we handle these grazing lands in view of the fact that the very large proportion of the

sheep in the West are now pastured on this public range, the estimate of the sheep using these free pastures being not less than twenty-two million, as previously stated.

The proper handling of this big pasture of Uncle Sam is a very important one for the reason that to get the best results we need their most intelligent use and reasonable regulation, an opportunity to develop additional water and increase and preserve the grasses which grow on the range. It is conservatively estimated that the amount of animals that can be produced and annually handled upon that vast area will be increased from 25 to 40 per cent by substituting intelligent use for the existing misuse.

I know very well that when this question of range preservation first came up people scoffed at it. Many of the men who worked out these problems at first did not know a great deal about our western conditions but they have been steadily learning and it has been scientifically proven today in the National Forests that range control does mean a more permanent and satisfactory industry; that range control means you can raise more animals per acre than you can without it, and the time has come when we must decide how we can best obtain this federal control on the open range.

In relation to the control of the open range I remember very well attending a meeting of the Colorado Cattle & Horse Association a few years ago, which was attended by many men who for years had been working on some satisfactory solution of the control of the western range. The atmosphere was, as often occurred in those meetings, rather highly charged electrically, and finally one man got up and put the situation pretty tersely when he said, "Mr. President, I think the time has come to give us federal control and then I believe we will raise more hay and less hell." This happens to be an incident in my personal experience gentlemen, but it illustrates in a homely way the real situation.

Now I want to take up this question of the homesteader, and I want to say

some things about him with which I believe every man who has lived in the West will agree, and that is this; that every clear thinking man in the West knows that the real homesteader, the man who comes out into this western country and in the face of privation builds up a home and raises his family and really lives there and has not come simply to sell out, is the best asset we have in the West today.

In the troublesome times that we are approaching in this country we want men of vigor, grit and manhood, that have nerve and have got the stuff in them to make good almost anywhere. We don't want the nestor who is in the hands of professional land sharks who only make trouble and who file on land only to sell it to the stockmen. We are ready for any just law or measure that will help the man who wants to make a real home, and we will hold out to him the hand of fellowship.

Some of you were familiar with the history of this movement forty years ago when President Hayes appointed a commission to study the best handling of the public lands of the West, and ever since then this question of how to most intelligently and justly handle the public range has been constantly agitated. Something like fifteen years ago the American National Live Stock Association started on a definite policy. That policy being that federal control was the most practical way of handling this matter. There were a good many ideas, some men advocated a policy of letting it alone, but that policy has proven valueless, it has proven that every year the carrying capacity of the open range has weakened and that policy has not spelt prosperity.

While you who are engaged in this industry are now experiencing an era of great prosperity you want to realize that you still have this great problem confronting you and there is in the land today a feeling that something has got to be done about the control of the public lands.

We must always remember that the perpetuation of the range grasses and such control of grazing as will allow

these grasses to reseed annually, will enable us to maintain and perpetuate, as a vital national asset, these grazing ranges. To do this they must be handled in an intelligent manner. Another policy has been suggested, that of the range homestead. Last year in March a number of us including Mr. McClure and other members of your Association, together with a delegation from our Association, attended a hearing in Washington before the public lands committee of the House of Representatives. The question discussed being whether the range homestead bill was the most practical way to handle the lands of the West or whether there was some more beneficial way of handling these lands. This was discussed with great vigor. Mr. Ferris, the chairman of the Public Lands Committee of the House, then introduced the 640-acre grazing homestead bill, claiming that was all the West needed. It is quite probable that the operations of the 640-acre grazing homestead bill may be of value to the West, but it is probable that in operation its benefits will be found to apply only to a limited area. Some claim that this bill will do immense good, others that it will have but a limited benefit. Some claim that in their judgment not more than 10 per cent of the 280,000,000 acres of unappropriated, unreserved lands will be taken up under this 640-acre grazing homestead bill. Other practical men say that a much larger area will be taken up.

There is one thing that is sure, and that is this: that the most vital step that should be taken on this important question is the complete classification of the 280,000,000 acres involved that we may proceed intelligently. Such a classification gentlemen, seems to me is only the part of good common horse sense. Some have said that classification of these public lands will be such a long winded affair that it will be many years before it can be accomplished, but I want to tell you that only two years ago the Forest Service, who have under their control about 180,000,000 acres of land, started a classification and that within eleven months they



completed quite a thorough classification of over 81,000,000 acres, which is a much more intensive classification than we will need for the grazing lands. It will not be necessary to have nearly so intensive a survey as in the forests and the thoroughly practical classification showing such lands as are fit for agricultural purposes, such lands as are applicable to the grazing homestead bill, and such lands as are only fit for grazing in large tracts, should be completed within two years.

Many bills have been introduced on the subject of federal control of public grazing lands. Some of these bills say nothing whatever about classification, but nearly all of them refer to the range homestead; some of them limiting the homestead to 640 acres as being large enough for the reasonable support of a family; other bills stating there should be a larger land unit of from two to four sections.

Now gentlemen, we of the American National Live Stock Association who have worked on this public land question so long, have made up our minds that the time has come to have introduced in Congress a bill which involves three principles:

First: Classification.

Second: The 640-acre range homestead where land is of such quality that that area will reasonably support a family.

Third: A definite and unquestionable provision that the balance of the land shall be put under definite leasing law such as now exists within the National Forests.

Such a bill will be considered at the meeting of our Association in El Paso on the 25th, 26th and 27th of this month. We want to make of this meeting a clearing house on this important matter, and I hope everyone of you will come over there to take part in the discussion of this most important question, and that your officers will send a special delegation to confer with us on this matter, so we can go before Congress with a bill definitely outlining what we want and what we believe to be fair and just.

Most of you, I presume, are familiar

with what is known as the Ferris Bill, which was introduced in this Congress and which carried with it the approval of Assistant Secretary Jones of the Department of the Interior.

Last spring the West had the good fortune to have a visit from Secretary Houston of the Department of Agriculture, who traveled through this western country and looked over the problem on the ground. Secretary Houston was accompanied by a man who is better posted on the general conditions of the public range and the grazing grasses thereon, than any man I know. I refer to Mr. A. F. Potter, Associate Forester.

After his return to Washington we learned that the Secretary would be willing to discuss with Mr. Tomlinson and myself this question of a leasing bill and the grazing homestead.

On conferring with Secretary Houston in Washington we found him very much interested in this problem of range control and desirous of doing what he could to forward some practical plan.

We also had a frank discussion with Secretary Lane as to the merit of this measure and at his suggestion took up the question with Assistant Secretary of the Interior. Mr. A. A. Jones.

There seemed to be some doubt whether the administration of this measure should be handled by the Department of the Interior or Department of Agriculture, but it is hoped the two Departments can agree on some plan of co-operation.

Congress has never taken so much interest in this matter of the control of the grazing lands as at present and thus far in the present session of Congress about ten bills have been introduced. What is known as the Ferris Stock Grazing Homestead bill has passed the house and is now before the senate. Many other bills have been introduced, some providing for leasing others merely covering the question of the range homestead. The Ferris bill, which seems to be finding most favor in Congress, unfortunately does not provide definitely for classification nor does it make any provisions

for leasing such portions of the public lands as are not found applicable to the Agricultural Homestead Bill or the Grazing Homestead Bill.

It has been suggested by some that the proviso in the Ferris bill to the effect that only such lands shall be applicable for stock grazing homesteads as are of such a character that 640 acres will support a family, shall be eliminated. I feel that this elimination would be a serious mistake as it is necessary to have a definite understanding in the bill of exactly what land is applicable for range homesteads. We in the West, want to encourage the real homesteader but we cannot afford to encourage the professional locator and nestor whose purpose in filing is merely to sell out to some of his neighbors in the stock business.

There have recently been submitted to Congress certain definite suggestions as to modifications of this bill which I believe will greatly improve it, and which will incorporate in it the three principles which, as I have before stated, seem essential. First, classification; second, the range homestead idea; and third, the leasing under Federal control of the balance of the unappropriated, unreserved public lands. These modifications are quite in line with the resolutions which you have passed in this convention and on which I heartily congratulate you.

You all realize that water is the life blood of the range; every man needs it. Under the Federal control plan a fixed use of the range is given and the stockmen are then justified in developing more water, building fences and making other definite improvements, as he has a definite, consistent and scientific basis on which to work.

Other suggestions which have recently been made as to modification of the Ferris bill, of which I am sure will interest you. The first is that it should be provided in the bill that the secretary may, in his discretion, require any entry under the proposed act to take such form and to be so disposed as to secure an equitable distribution of stock water and the resources.

What we of the West want is no

only a bill to maintain the present water on the range, but an encouragement to develop more water, as we all realize that the development of an adequate water supply not only increases the usefulness of the present range but opens up ranges now unused.

Another suggestion has been made which seems to me excellent: that a proviso shall be made that the secretary, in his discretion, designate as stock driveways and withhold from entry lands needed for use in the movement of stock to summer or winter ranges or to shipping points. This is a practical suggestion of which all stockmen will appreciate the need.

I could continue, gentlemen, on this subject and quote from many men who have spent years of their life in studying this range question from a scientific and practical standpoint; most of them are men who do not own a single head of stock and whose point of view is disinterested, and they all agree that the time has come when it is absolutely essential to the maintenance of these range grasses that some form of Federal control of these public lands be established, and I believe that it is only through substituting an efficient handling of the range for the present waste and misuse that we can rely upon the permanence of our industry on the open range.

In conclusion, gentlemen, I merely want to say that I am more than pleased to have had the opportunity to be with you here, and to urge that just as many of you as possible come to the approaching convention of the American National Live Stock Association at El Paso, and to assure you that the people of El Paso are working day and night to make of your entertainment a thorough success and will give you a reception second to none. We are arranging to install your wool exhibit in their chamber of commerce building in a most attractive manner, and I hope you will be able to so arrange your affairs as to attend the convention and to take part with us there in the important discussion relative to the handling of these public lands in such a just way that they will not only

be a benefit to those using them but the handling of the land situation may prove credit and benefit to all people in the nation.

#### FROM SUGAR CITY, IDAHO.

Thinking that a few lines from this part of Idaho, the Gem of Mountains, would be acceptable to many of your subscribers, I am taking the liberty of writing.

Fremont County, before its division,



A. N. MURDOCK, WITH A SHEEP KILLER.

was noted for its large productive fields of wheat, peas and beets. The home-seeker, or dry farmer, as he is commonly known, has encroached so steadily and rapidly upon the spring and fall range that it is getting very difficult to find feed for the sheep, except on the National Forest.

Our winter has been severe until about February 5th, and the price of hay jumped to \$10, \$12 and \$15 per ton. There was danger of some herds on the winter range perishing, but the mild weather and south wind has cut

the snow so rapidly that there will be little loss, and the advance in wool caused the sheepmen to smile behind their ears.

In compliance with one of the resolutions adopted by the 52nd Convention in January, 1916, asking all flockmasters to get out and catch a coyote or wolf, will say that I got mine, and it was so large and savage that the bounty officer could not tell which it was, can you? Here is its picture. Not the fellow in the rear, for I have known him over fifty years. It is the one in front with the gray fur coat. However, I believe he has killed \$1000 worth of our high-priced Cotswold sheep and lambs, and no doubt half as many dollars' worth of my neighbors' chickens, turkeys, young pigs, etc.

After my 50th birthday I turned the flock over to my sons. Last fall they sold over \$4000 worth of rams, and expect to do better this year.

Enclosed find check to renew my subscription to the Wool Grower.

A. N. MURDOCK, Idaho.

#### LAMBING IN TEXAS.

I am sending you check for \$2.00 to pay for National Wool Grower, one copy for myself and one for Coates Brothers.

It is very dry here this winter. No rain since last September, but sheep have wintered well, but all sheepmen are feeding cake, and sheep are holding up well. If we get rain by the middle of this month, there will be a good lamb crop, otherwise it will be a failure. We are feeding 4,000 ewes and 2,000 lambs on cake, and they are in good shape. We have them in small pastures and not under herd, and we will lamb in April so we can wait until then for rain.

Coyotes have killed some sheep for us this winter, but we have trapped about fifty on the outside of the pasture. We keep traps set along the fence on the outside, but a few will scratch under and get a sheep before we get the wolf. We have a pack of dogs that we use for catching them.

W. F. COATES, Texas.

# The Brome Grasses

By ARTHUR W. SAMPSON.

**I**N taking up a discussion of the brome-grasses we are meeting with by far the most important grass group, the Fescue (*Festuceae*) tribe, of any from the standpoint of range forage. To this tribe belong no less important grasses than the fescues, the bluegrasses, orchard grass, salt grass, etc., which constitute so large a part of our most valuable range and hay grasses.

There are on record about 100 different kinds of brome-grasses. Of this number some 40 occur in the United States, about 30 of which are found on western ranges in varying abundance. The greater number are valuable on the range and some are of the highest value as forage plants. Botanists agree that 18 kinds or species are emigrants from Europe. Some of these are regarded by farmers as weed pests, while others are held in high esteem for grazing and for hay. On the whole the brome-grasses are highly valuable on account of the fine quality of hay they produce and the relish with which they are cropped on the range, both when green and after maturity. Some stockmen rate certain kinds of brome-grasses on a par with the choicest bluegrasses; and while they are probably eaten with less gusto than the latter, the quality of the herbage of many of them is about all that might be desired.

Brome-grasses are annuals, biennials or perennials with dense or lax seed or flower heads, each little seed cluster or panicle having 5 or more individual flowers. The seed heads are either awnless or provided with short awns or barbs. The leaves are flat and large, thus adding symmetry to the tall, robust plants of which brome-grasses are characteristic.

## Awnless or Hungarian Brome.

(*Bromus inermis*)

This is one of the few grasses introduced from Europe that have won a permanent place in American agriculture. It first attracted the attention of men connected with Agricultural Ex-

periment Stations. After being grown experimentally for a number of years it began (in the early nineties) to attract attention generally until it is now heralded by farmers and stockmen from Oklahoma into Canada and west to the Coast.

## Description and Distribution.

Awnless brome-grass is an erect perennial, with creeping root-stocks, as shown in Fig. 1; leaves flat and open, flower heads nodding, the flower scales awnless or nearly so. As stated, it is a



FIG. 1. AWNLESS OR HUNGARIAN BROME GRASS. A VALUABLE HAY AND PASTURE GRASS.

native of Europe, and is cultivated to a marked extent in this country. It does not do particularly well in the South, but where the temperature is favorable this brome-grass gives a good account of itself on relatively arid as well as in moist soils, but not in wet meadows. I have seeded a number of depleted summer range lands in Oregon, California and Utah to awnless brome-grass, and have obtained satisfactory stands as high as 8,000 feet in

the Northwest and at 9,500 feet on the more southerly ranges. The land must not be too dry or the soil very shallow where the seeding is done, however, and care must be taken to procure seed of good germination strength. Further, the area seeded should not be too closely grazed the first year, as the young plants are liable to suffer severely from trampling.

## Forage Value.

Awnless brome-grass is more of a pasture than a hay grass. Undoubtedly we are generally agreed on the fact that palatability is the most important single characteristic of a grass, for with palatability nutritiousness almost invariably follows. I, personally, am not of the opinion that the grass in question is eaten as ravenously as Kentucky bluegrass but, except in the typical bluegrass region, awnless brome is a much more remunerative crop,—a more economic beef and mutton producer, owing to the notably larger yield per acre. Some disappointments have been met with where it has been grown exclusively for hay as it has a tendency to become sod bound and the height growth is not as great after a couple of seasons of cutting. For grazing purposes, of course, this is a negligible matter.

## Rescue Grass.

(*Bromus unioloides*)

This is one of the common range and hay grasses which, owing to its early spring growth and high palatability is often the "main stay" in the forepart of the season.

## Description and Distribution.

An erect, rapid growing annual (in the north a perennial) with hairy stems 1 to 3 feet tall, clothed with numerous rough leafage. The seed heads when mature, are spreading and quite attractive in appearance.

Rescue grass is a native of South America and as might be expected, therefore, is most common in the Southern states though, to be sure,



found more or less throughout the West.

#### Growth Requirements.

The best stands are invariably found in the deeper and richer soils of medium elevation. Only a medium amount of moisture is required for satisfactory development, however. Scab lands or rocky soils are not usually inhabited by rescue grass. It commonly occurs in cultivated fields, along irrigation ditches and not infrequently in close association with other grasses.

#### Forage Value.

Rescue grass is one of the winter growing plants in the South, where it is seeded or otherwise fostered to a considerable extent. In Texas and Louisiana, for example, it makes more forage in February and March than any other grass thus far tried. When cut for hay early in the spring the yield is usually two tons or more per acre.

This grass is relished by all classes of stock and is eaten with gusto even after seed maturity after the leafage is air cured. Its nutritive value is high at all times and it is richer in protein and fats than rye and oat fodder. On sheep ranges nothing but the seed stalks are seen and even these are eaten early in the season by horses and cattle.

#### Large Mountain Brome-Grass or Wild Oats.

(*Bromus marginatus*)

This is one of the most valuable, it not of primary importance, of the native brome-grasses found on the summer range lands in the mountains. Few plants are grazed with more gusto.

#### Description and Distribution.

This grass is a hardy perennial, and on favorable situations almost invariably forms a dense turf. The seed stalks are erect and stout, from 2½ to 4 feet high, the sheaths of which are generally clothed with rather long, soft hairs. As shown in Fig. 3, the seed head is erect and somewhat narrow, of a purple cast and from 3 to 6 inches long. The fibrous root system is deep and widely spreading so the plant withstands trampling remarkably well.

Tall mountain brome-grass occurs from Washington to Montana and South Dakota to Southern California

and New Mexico, thus taking in the chief western range region. It often occurs in dense stand.

#### Growth Requirements.

This grass is found from medium to high elevations in clay loam and sandy loam soils on medium moist to relatively dry lands. It endures shade fairly well and furnishes no small amount of



FIG. 2. RESCUE GRASS, ONE OF THE MOST VALUABLE OF THE BROME GRASS ON RANGES OF THE SOUTH.

feed in open to medium dense stands of timber. In the characteristic brush lands, notably fire willow and buck brush, in the northwest large mountain brome is commonly associated with such valuable forage plants as fireweed, June grass (*Koeleria*) and blue bunchgrass (*Festuca*). In more southerly regions it is frequently associated with

the wheat and rye grasses, mountain elder, deer brush and other common shrubs.

#### Forage Value.

The forage value of tall mountain brome is high as the herbage is grazed closely by all classes of stock. Owing to its rank growth, however, it is better suited to the grazing of cattle and horses than to sheep. Horses and sheep invariably feed on the seed heads in the autumn and they are quite fattening. When the herbage is grazed off early in the summer it continues to grow luxuriantly and at the close of the season has produced a record crop of leafy foliage equal in palatability to the early crop. This aftermath, as it were, is cropped closely and is a very superior feed.

Various tests have brought out the fact that this grass responds particularly well to reseeding and establishment when the lands are handled according to the deferred grazing system, the plan of which has been discussed in a previous article. The seed crop ripens relatively early and the germination strength is particular good when the plant is not grazed prematurely year after year. The seedling plants are vigorous, strong and deep rooted.

#### Porter's Brome-Grass.

(*Bromus porteri*)

Once when interrogating a stockman as to the value of this grass, he replied, "If you 'grassmen' will double or treble the stand of good old Porter's brome on my range you may certainly expect the treats from me!" The opinion expressed is in accord with that of other stockmen where this species is found in abundance.

#### Description and Distribution.

This, like large mountain brome, is a tufted, deeply rooted perennial grass with slender erect stems, usually not exceeding two feet in height. It grows somewhat less rankly than the species just described. The seed heads are from 3 to 7 inches long and each individual flower cluster is made up of from 5 to 10 flowers. The flower or seed scales are densely hairy and provided with a slender awn ¼ inch long.

It occurs from northern Canada

southward to Arizona and New Mexico. It is one of the most common bromes met with in Montana, Wyoming, Colorado and Utah, as well as on the Pa-



FIG. 3. TALL MOUNTAIN BROME GRASS OR WILD OATS, MOST VALUABLE OF THE BROMES ON THE HIGH SUMMER RANGES OF THE WEST.

cific slope. It usually occurs at medium elevations, being chiefly confined to altitudes between 3000 and 7000 feet.

#### Forage Value.

While Porter's brome-grass does not occur in as dense a stand as some of its allies, it is found in such abundance as to figure strongly in the forage crop-production. The herbage being relatively fine in texture and the plant not too robust, the leaf-blades are eaten with much relish by all classes of stock. Until the seed approaches maturity cattle and horses consume a fair proportion of the flower stalks. The seed heads are eagerly eaten before the seeds are dropped.

#### Other Bromes.

Before dropping the discussion on brome-grasses, mention should be made of two more species with which the stockmen have much to do.

#### Soft Cheat.

(*Bromus hordeaceus*)

#### Description and Distribution.

This shallow rooted annual, introduced from Europe, grows from 1 to 3 feet tall, the stalks of which are provided with an abundance of downy or fine hairy, velvety leaves. The flower or seed heads are 2 to 4 inches long and provided with limber awns, about one-half inch long.

Soft cheat occurs throughout the United States and is very common between elevations of 2,000 to 6,000 feet in Wyoming, Montana, Utah, Idaho and Arizona, and on the Pacific slope. It grows in dry to medium moist lands and in waste places.

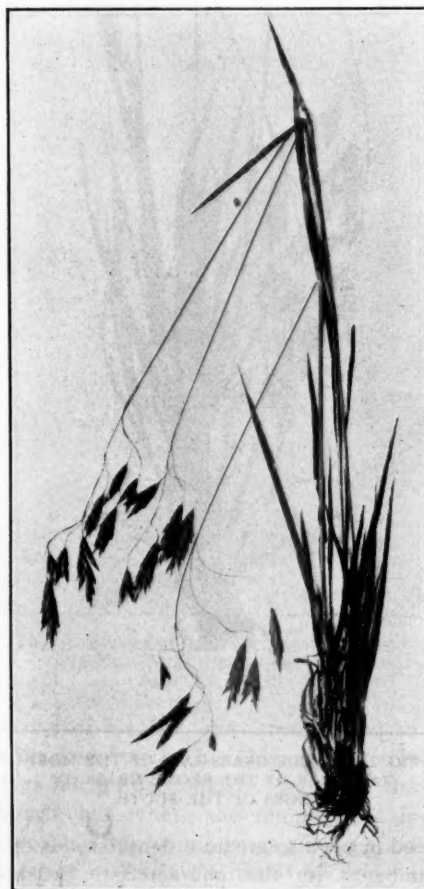


FIG. 4. PORTER'S BROME GRASS MUCH RELISHED BY ALL LIVESTOCK.

#### Forage Value.

One of the interesting things about this well-known grass is that where it occurs in profusion on the range, it is

almost a certain indicator of mismanagement, either in the past or at the present time. It is well known that the first plants to come in on a denuded or overgrazed range are annuals. Soft cheat is an early forerunner of the most permanent forage grasses. It is grazed with relish only in the spring, and, therefore, has all the time needed to produce a good seed crop, which, by the way, has unusual fertility. Stock feeding exclusively on soft cheat put on weight but the fat is not of a "solid" character and is not of a very permanent kind; and horses feeding on it cannot stand as much work as can horses subsisting on the herbage of many other kinds of grasses.

#### Cheat or Chess.

(*Bromus secalinus*.)

This is probably one of the best known grasses to farmers and ranchmen, since their fields are almost invariably invested with it. It is so well known that little need be said of it.

Cheat is an annual, 1 to 2 feet high, with smooth leaf blades and pyramidal seed head. It is well known throughout the United States and occurs in every state in the Union.

#### Forage Value.

Cheat generally occurs only in scattered stand on the range and is, therefore, not particularly important. While it is grazed by all classes of stock, it is never cropped very closely and is not equal in palatability to many of the related species.

#### KICKING ON HEAVY LAMBS.

Orderbuyers for eastern killers at western markets have had difficulty in giving satisfaction in the matter of weights this season. Orders have called for 75@80 pound lambs, which have been abnormally scarce and when 85@90 pounds stuff has been sent, protest has promptly resulted. Colorado put in a lot of big lambs and they have been penalized. Everybody wants light chops and roasts. Colorado marketed a large percentage of its crop in January and February than ever before.

J. E. P.

Have you paid your \$5.00 dues yet?

**HOT COMPETITION****FOR MUTTON**

Some philosopher has said that if cod fish cost a dollar a pound, epicures would prefer it to lobster. This season it has been an epicurean dish and those who eat it at any price have had an opportunity to assert their preference.

Mutton, which includes lamb, has had hot competition. At a period when sheep and lambs were commanding the highest prices in trade history, beef and pork were both cheap. Retailers found little profit in vending lamb or mutton, but their rake-off in the case of beef and pork was large and those commodities were pushed.

"Yes, we have lamb, but I hate to ask the price for it," remarked a retailer apologetically. The customer was regaled with a yarn concerning scarcity and high cost with the result that pork was substituted. When hogs were selling at \$6.00@7.00 per hundred-weight, it was surprising that lamb or mutton had an outlet. Hogs subsequently advanced to an \$8.50@9.00

basis and cattle to \$8.00@9.50, but mutton trade was unaffected, those who consume it regardless of cost having accustomed to the price.

Retailers have been charging 30 to 40 cents per pound for lamb and restaurant cost of chop orders has been put up to 50@65 cents. At that the "orders" are microscopic. Heavy lambs have been unpopular because restaurant men demand a carcass that will go as far as possible in the distribution process. The customer who orders chops must be satisfied with a few ounces.

Mutton consumption has, by virtue of necessity, been reduced to the smallest volume in a quarter of a century almost the entire supply has been of western origin.

J. E. P.

Have you paid your \$5.00 dues yet?

**EASTERN BUTCHERS BUY FEW.**

Although eastern orders for lambs have been a stout prop under live mutton trade, this winter butchers along the Atlantic seaboard have taken comparatively few and have been forced to Western markets by the fact that practically none were available in local territory. Buffalo, which has been on a \$11.75@12.00 basis for lambs, has been bare most of the time.

"We cannot sell much lamb or mutton," said a Philadelphia distributor.

**Fowler & Smith**

Manufacturers and Dealers in  
Harness Saddles, Strap-Work  
HARNESS REPAIRED

New Harness Exchanged for Old  
Phone Was. 1026

139 W. First South St. Salt Lake City

**TO WOOL BUYERS**

I CAN DELIVER 15,000 COTSWOLD FLEECES AT SHEARING TIME

W. F. STONE

LEADORE, IDAHO

**FIRST ANNUAL RAM SALE**

*Entries made for the First Annual Sale to be held by the National Wool Growers' Association at Salt Lake City, Utah, August 30 and 31, September 1 and 2. Additional entries later.*

**RAMBOUILLETS**

150 Purebred Yearling Rambouillet Range Rams—Consiged by Cunningham Sheep & Land Co., Pilot Rock, Ore.

**HAMPSHIRE**

25 Registered Yearling Hampshire Stud Rams—Consiged by Wood Live Stock Co., Spencer, Idaho.

100 Yearling Hampshire Range Rams—Consiged by Wood Live Stock Co., Spencer, Idaho.

25 Registered Hampshire Stud Rams—Imported by F. W. Harding, Waukesha, Wis.

25 Registered Hampshire Stud Ewes—Imported by F. W. Harding, Waukesha, Wis.

**COTSWOLDS**

25 Registered Cotswold Stud Rams—Imported by F. W. Harding, Waukesha, Wis.

25 Registered Cotswold Stud Ewes—Imported by F. W. Harding, Waukesha, Wis.

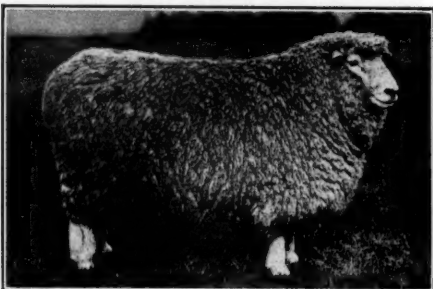
**CROSSBREDS**

50 Lincoln-Rambouillet Yearling Rams—Consiged by Cunningham Sheep & Land Co., Pilot Rock, Ore.

50 Lincoln Rambouillet Yearling Rams—Consiged by Wood Live Stock Co., Spencer, Idaho.



## The New Zealand Romney Marsh Sheep Breeders' Association



### Flock Masters of America Attention!

The New Zealand Romney Stud flocks can supply your demand for rams and breeding ewes.

**Our Romneys hold the World's Championship**

The climate and country make them suitable for all parts of the union.

Flock owners visiting the Panama Exposition should make a point of inspecting the **ROMNEY SHEEP** from New Zealand.

Correspond with the Association for full particulars. Write today.

**ERNEST J. WACKRILL, Secretary**  
P. O. BOX 40  
Feilding, New Zealand

N-Z. Romney Marsh Sheep Breeders' Association (Incorporated by Charter)

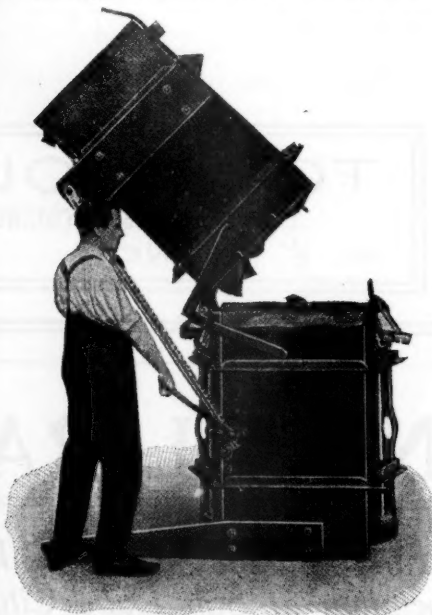
"Retailers will not buy it when dressed carcasses are worth 20 cents per pound or more. Beef and pork have both been cheap and those commodities have been pushed at the expense of mutton. Conditions of a few years ago when lambs sold at \$6.00 and hogs at \$10.00 per hundredweight have been reversed. This year lambs have cost \$10.00@11.50 while hogs have been worth \$6.00@8.50."

J. E. P.

### THOMSON ON

### WOOL PROSPECTS

"If there ever was a year when the grower should hold wool until after shearing, time this is it," said R. B.



THE COOPER WOOL BALER.

Thomson of the National Wool Warehouse. "Prices are going up regardless of whether the war in Europe continues or not. We cannot evade the fact that a world's shortage exists. War means waste and everyday the European conflict is continued makes the shortage more acute.

"Should Europe go on a peace basis in the near future, the wool market will probably decline, sentimentally, but I do not believe much wool would be sold on such a decline. It would be merely a matter of temporarily depressing quotations. At the present moment, American manufacturers have

no assurance of getting a normal supply of foreign wools. Vessel room is scarce, and an embargo exists both in Australia and New Zealand, where American dealers have bought wools they cannot move. Eventually it is probable that they will get their property, but nobody knows when, and time is an important factor.

"That the domestic clip will be no larger than that of last year is a certainty, and growers should secure its full value. In trade circles, a feeling exists that prices are destined to go materially higher. Prices are already 25 per cent higher than a year ago, and the world's markets are firm. Owing to drouth, the Australian clip is woefully short, a fact that must not be lost sight of.

"There will be less wool sheared in the eastern half of the United States than for many years past. Native flocks have been reduced to small proportions and feeders are in possession of few western sheep and lambs for shearing purposes.

"We may look for choppy markets, but growers can afford to remain serene. Should the war end, prophesy of a slump is being made, and lowgrade wools may be affected as large quantities held for military purposes would be released, but in the case of Merino wools, such as fine and half-bloods, no such prospect exists. Values of such wools are not based on military conditions and rest on a sound foundation. Their principal users, Germany, France, and Austria, are taking practically none, and at the conclusion of the war will require large quantities to replenish exhausted stocks.

"The whole situation and prospect look good from the viewpoint of the grower who has nothing to lose and all to gain by holding until the clip is ready for delivery."

J. E. P.

### \$10.15 FOR FEEDERS AT DENVER

Something of a pyrotechnical nature occurred at Denver late in February when \$10.15 was paid for 58-pound feeding lambs, freight paid to the Missouri River. This price was a record for the Denver market.

# The English Wool Situation

(By Our Correspondent In England)

WE are passing through some wonderful times, and wool does not cease to command the attention of all sections of the textile industry. The movement of values clearly indicate the invaluable commodity it is at the present time, and there is emphasized in a remarkable manner what wool is doing at this period in the history of the world. The British Empire may be passing through a critical time, but wool is strong enough to lean upon in providing us with the requirements which soldiers need to face a great foe. Twelve months ago it was stated by a New York authority that wool would get dearer and scarcer, and if the war continued the men on the field would require all the wool available. At the time the statement did not meet with the attention it deserved. However, a different state of affairs at last prevails, and we see today that after all there is going to be no surplus stock. The steady advance in values is the best proof possible of the standing of the raw material and to find values for Merinos having advanced something like 100 per cent during the past twelve months, and crossbreds having moved up fully that since the outbreak of war clearly shows how valuable a commodity wool is at the present time. We have just seen the finish of the first series of London sales for the current year, and the position of the raw material has been emphasized over and over again. At the beginning very few saw any justification for a further rise in Merinos, but values have moved up anywhere from 2 cents to 4 cents per pound, and crossbreds too have appreciated in like manner. At the present time there seems to be no top to wool values, and it is being absorbed quite as readily as if it was costing 12 cents per pound instead of in the neighborhood of 48 cents for greasy Merinos.

## A Wonderful Series.

The first auctions of the year must be summed up as remarkable. They have lasted for three weeks, and yet the trade shows no signs of exhaustion. Notwithstanding that invoices are aver-

aging well on towards \$200 per bale for the best wools, yet the accounts are being met quite readily, and we have heard less this year about financial stringency that we did previous to the outbreak of war. It is really remarkable how wool is being financed, especially in view of the tremendous amounts required to pay for direct imports and London purchases. Of course banks know that users must have the raw material in order to complete the large khaki orders which many have booked, and so long as they are doing a profitable trade, not much difficulty is encountered in obtaining the necessary accommodation. Apart from that, prices have moved upwards in a most sensible manner. The series opened with Merinos showing a 5 per cent advance. In fact 2 cents about covered the improvement. Russia soon made her influence felt by taking big weights of Australian scoured Merinos at record values, paying quite freely from 72 cents to 82 cents per pound. The first two days of the second week of the series saw a rather quieter feeling, but the reported sinking of several vessels carrying imported cargoes, served to buck things up again, and the final week of the auctions brought forth bids on a full parity with the highest point of the series. There was certainly no slackening in the call for the raw material, and continuous record prices were paid.

The attitude of Russia throughout the auctions has been excellent. The buying broker representing the interests of our Ally seemed to be able to pay almost any price, and when "pushed" paid anywhere in the neighborhood of 78 cents to 84 cents for good scoured Merinos. A very satisfactory feature was the ability of two or three home trade buyers to pay the top side of three shillings for scoured Merinos, and certainly some excellent wools have been secured. Still it is satisfactory to know that the raw material has moved out of hand very freely, and even the faulty descriptions have also been absorbed with considerable readi-



One of My Stud Rams

## CALIFORNIA RAMBOUILLETS

My Rambouillets are large, smooth and well covered with heavy fleeces of long white wool. They are bred in a high, dry country and are very hardy. I have 2000 one and two-year-old rams for this season. If you visit the Fair, call and see my flocks. My prices are reasonable and my rams will suit the range country.

**CHAS. A. KIMBLE,**  
**Hanford, Cal.**



One of My Stud Ewes

## REGISTERED HAMPSHIRE FOR SALE!

Seventy-five Rams, raised in the Mountains of West Virginia; 75 young ewes from imported sires and dams.

Will contract now for July delivery.

Information gladly given about Virginia and West Virginia as a sheep country.

**H. W. McLAUGHLIN**  
RAPHINE, VA.

## RAMBOUILLETS



One of Our Stud Rams

For this season we offer  
150 two-year-old Rambouillet Rams.

900 Yearling Rambouillet Rams.

300 Lincoln-Rambouillet Crossbred Yearling Rams

150 Yearling Hampshire Rams.

**Cunningham  
Sheep &  
Land Co.**

Pilot Rock, Oregon

ness. One has heard less of late about the unacceptableness of burry parcels than since the outbreak of war.

Let us look for a moment at the position of Merino prices compared with twelve months ago, this furnishing the best evidence of the influence of the war upon wool values. The Goonoo Goonoo brand is of excellent characteristics, grown in the New England district of New South Wales. It is a well-known mark and always commands exceedingly good competition. Below we give particulars of how the wool sold at the recent auctions compared with the corresponding series a year ago, and the percentage rise is indeed marvellous:

Description	Jan. 1915	Jan. 1916
Grease, 1st combing.....	25	46
Grease, 1st combing hogts..	26	46
Grease, 2nd combing.....	21	45
Grease, 2nd combing hogts..	21	45
Grease, 2nd clothing hogts..	19½	34
Grease, broken .....	18	35
Grease, broken hogts.....	19	33
Grease, skirts .....	12	22
Grease, bellies .....	13½	26

As long as the war lasts one must expect to see crossbreds boom, and their steady march upwards need cause no surprise. Of course the deficiency in weight of New Zealand new clip no doubt has contributed to the last rise, but all the same the placing of large Government orders during the past month has also contributed to the advance. The offerings this series of New Zealand crossbred wool have been exceedingly limited, and one could have appreciated 50,000 bales more but they are not even in sight. However, a sprinkling has been offered, and excellent prices made. Below we give a well-known clip offered at the auctions, and the prices the same descriptions of raw material realized at the corresponding series a year ago:

Description	Jan. 1915	Jan. 1916
Greasy half-bred H.....	33	42
Greasy half-bred .....	31	44
Greasy half-bred .....	31	42

Greasy 1st ¾-bred H.....	31	42
Greasy 1st ¾-bred .....	31	43
Greasy 1st ¾-bred .....	31	42
Greasy 2nd ¾-bred H.....	31	42
Greasy 2nd ¾-bred .....	31	42
Greasy 2nd ¾-bred .....	30	41
Greasy 1st Lincoln H.....	30	42
Greasy 1st Lincoln .....	30	41
Greasy 2nd Lincoln .....	29	41
Greasy crossbred .....	29	40
Greasy crossbred H.....	29	40
Greasy crossbred H.....	29	39
Greasy D Lincoln .....	28	38
Greasy 1st crossbred pieces	29	39
Greasy 2nd crossbred pieces	25	32
Greasy crossbred bellies H..	24	29
Greasy A crossbred lambs..	32	38

Slipped crossbreds have sold exceedingly well, and often made about 4 cents more than they did in December. These wools have occupied a position they have never previously done since they began to come forward from New Zealand, and after all no raw material is better suited for the production of khaki cloths. Scoured crossbreds have been scarce, but have sold very freely at the same advance as slipes. As a matter of fact, there has been a keen call for every bale of crossbred raw material.

Turning to home manufacturing conditions, there is nothing to say about these except what is satisfactory. Large khaki orders were placed in December and early January, fresh tenders have been invited by the Government and mills everywhere are in a state of great pressure, there being work for every man, woman and child who will work. The consumption of crossbred wool is guaranteed for the whole of this year, and it is patent that there is going to be no surplus stock of raw material. America seems to have bought fairly freely in New Zealand, and the remaining supplies will all be wanted. That is really the position today. If we write for a month we can say no more than that machinery everywhere is fully occupied, more wool than ever is going into consumption, and army requirements getting bigger. Consequently the future of wool values seems to be fully assured.



**FROM EASTERN MONTANA.**

We have had plenty of snow in Eastern Montana with the mercury hanging from 20 to 57 degrees below zero since the 9th of January until early in February.

As everybody has plenty of hay losses will be light. Most of the sheep here have been on feed for a month or more.

Coyotes are numerous but losses are light from this source, our worst enemy is the poison weed which exacts a heavy toll from our flocks every year.

We had a very wet season last year which has had a tendency to attract the "dry farmers" to this section. The time is not far off not over three or four years, when there will be no open range left here.

The wool crop will be heavy in this section as no ewe lambs were sold here last season.

FRANK CLEM, Montana.

**\$162,000 SHEEP DEAL.**

Kemmerer Camera: We are advised that a deal was closed in Salt Lake City last week, whereby the Star Valley Livestock Company, comprised of A. A. and Thede Covey, have transferred all their sheep, land and range

interests to Dan Mackay, involving the payment of \$162,000. This is one of the largest sheep transactions to have occurred in Wyoming of late years, and it now places Mr. Mackay as one of the largest flockmasters of the West, as it was he who along with Mr. Ossler last year purchased the sheep and land interests of the Afton Live Stock Company, which was comprised of Steve Covey and O. H. Papworth.

The consideration for the sheep in this deal was \$10 for the ewes and \$7 for the lambs, which is a liberal con-

sideration during a winter range period.

**Lincolns — Cotswolds**

One carload of yearling Lincoln Rams, one car of yearling Cotswold Rams, a few cars of Lincoln and Cotswold Ram lambs, a car each of Lincoln and Cotswold Ewes; also a few choice stud Rams.

R. S. ROBSON & SON,  
Denfield, Ontario, Canada.



A band of 1000 purebred Lincoln and Cotswold Ewes. Bred from the best stock to be found in United States and Canada. Owned by Austin Bros., Salt Lake City, Utah

**Rams  
for  
Sale**

**F. S. KING BROS. CO.**

**LARAMIE, WYO.**

**RAMBOUILLET AND CORRIEDALE BREEDERS**

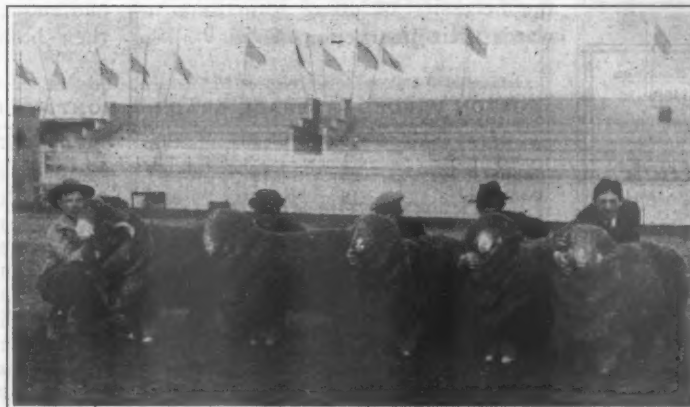
**500 REGISTERED  
RAMBOUILLET  
STUD RAMS**

**—  
1000**

**RANGE RAMS**

**—  
REGISTERED**

**EWES for  
STUD and FLOCKS**



Champion B. Type Flock, P. P. I. E.

**CORRIEDALE  
RAMS and EWES  
FOR SALE**

**also**

**Orders taken and filled  
for future importation.**

**Write for Information  
and Prices.**

## BREEDING EWES FOR SALE

One band strictly first-class open woolled breeding ewes coming two years old, in the spring of 1916. These ewes are in prime condition and should shear in the neighborhood of 9 pounds of  $\frac{3}{8}$  wool.

Also one band of open woolled three-year-old ewes, much the same description as the two-year-olds.

All bred to first-class Hampshire rams. For particulars call on or address,

**J. E. Morse, Dillon, Montana**

## Range Ewes For Sale

I have for sale 4,500 ewes from two to four years old, bred to Lincoln rams to lamb May 1st. These ewes are medium woolled ewes.

**E. S. McCARTNEY**

Box 105. Great Falls, Montana.

## EWES FOR SALE FOR APRIL DELIVERY

3000 Yearling Ewes.

4000 three-year-old Ewes.

3000 four-year-old Ewes.

All bred to Rambouillet and Delaine Rams, to Lamb in May.

2000 Yearling Ewes. 4500 Ewe Lambs.  
80 per cent. of the above are Cotswold grades balance Delaines.

**F. I. LONG, Great Falls, Mont.**

**A. J. HICKMAN & CO.,** (late of Hickman & Scruby,) Court Lodge, Egerton, Kent, England

## EXPORTERS OF Pedigree Live Stock OF ALL DESCRIPTIONS

Draft horses, beef and dairy cattle, field and show sheep, pigs, etc.  
Catalogues and references on application.

Breeders all over the world are doing well. They will soon import stud animals to a record extent, and those who import first, will get the best value for their money.

Have you forgotten to pay your dues?

## BOUNTIES AND WILD ANIMALS

**Hugh Sproat, Idaho.**

I have been reading Mr. S. E. Piper's address before the National convention, and cannot help thinking of the obligation the woolgrowing industry is under to the person or persons who unintentionally started the epidemic of rabies in the Northwest. We have been endeavoring to get some Federal aid for many years, but the Biological Service seemed unable to make up its mind whether the fur value of the coyote and its reputed ability to destroy rabbits, rats and other rodents did not overbalance its depredations, seeing that sheep were the principal sufferers. Now that human life is endangered, we are taken to task for our unbusinesslike methods of destruction, told that the bounty system is all wrong and needs overhauling. Acknowledged, but if all the states had got in like Idaho and Oregon and passed laws to assist in the eradication of predatory animals, we would not find conditions as they are today.

The State of Nevada is letting out periodic lamentations about the number of cattle bitten and the number of persons treated for hydrophobia in her hospitals. I ask you, Mr. Editor, for the facts regarding what Nevada has done to eradicate the coyote. From the number of bounties collected by the trappers in Idaho counties adjacent to Nevada, I was of the opinion that Nevada was a sort of sanctuary for the brutes. If that state is now awake to the necessity of doing something towards their destruction, we may all be

able to get together for a standardization of bounties, both as regards the amount to be paid and the part on which to collect the bounty, and I believe a definite step should be taken by the National Association regarding those two matters at the earliest opportunity. In spite of the opposition of the Biological Department to the bounty system, I believe it is the most feasible plan which can be adopted. If the states had uniform bounty laws fraud would be at a minimum, and with men employed by the Federal Government on the job the year around, we should very quickly see a diminution in bounties collected. I disagree entirely with Mr. Piper regarding the practice of liberating wolves or coyotes from traps. It is well known that especially in cold weather the coyote will eat its foot off below where the jaws of the trap grip, thereby quite often freeing itself, but to say that the practice is very general of turning loose female wolves or coyotes, I cannot believe it. I have never heard it insinuated in any locality with which I am acquainted.

However, I appreciate the work the Biological Survey is now doing, but would like to warn the higher officials in that department not to be disappointed with the showing which will be made by its trappers when worked out to dollars and cents per head of predatory animals destroyed. When it comes right down to counting the cost, that is where we have fallen down every time. The different states never had enough money appropriated to pay their bounties. When the appropriate

## BOSTON VALUES—AVERAGE GRADING MONTANA FINE AND MEDIUM COTHING

	1908	1909	1910	1911	1912	1913	1914	1915.
January .....	23	19	23	19½	17½	20¼	16	19¼
February .....	19	19½	23	18	17½	19½	16½	19½
March .....	18	20	22	16½	17½	19	17½	23
April .....	17½	20	21½	16½	17½	18½	18	23
May .....	15½	20½	21½	16½	18	17½	18½	22½
June .....	16	22	20	16½	18½	17	19	22½
July .....	16½	22	20	16½	19½	17	19½	22½
August .....	17	22½	20	16½	19½	17	19½	23
September .....	17½	23	20	17	19½	17	19½	23
October .....	18	23	20	17	20¼	16½	19	23
November .....	18½	23	20	17½	20¼	16½	19½	23½
December .....	19	23	20	17½	20¼	16	19½	...

tion was exhausted, the coyote has a chance to recuperate before another supply of funds was available.

Now with the coyote a menace to human life and the cattle and sheep industries alike, we are in a fair way to accomplish his eradication, but don't let us figure the cost per head. Let us get them.

### THIRTY-FIVE CENTS FOR MONTANA WOOL

Last week we received advice that the National Wool Warehouse had sold the 1915 three-eighths blood wool of Sprinkle Brothers of Chinook, Montana, at 35 cents, Boston. So far as we know, this is the highest price ever paid for Western range wool, but other dealers may have equalled or exceeded this figure.

The Sprinkle clip has always been recognized as one of the best bred clips in the West. This wool was carefully graded and baled by the Warehouse at the shearing shed, and it came through in very attractive form.

### WOOL SALES AT PENDLETON, OREGON.

We have had a corking winter; the thermometer stood at twenty-two degrees below zero, January 17. Snow fell about the 26th of December and laid on the ground until February 10th, when there was in the neighborhood of three feet all over this country. Many stockmen became very short of feed, but the actual losses of sheep were small. The cattlemen in the interior of Oregon have had some losses in a few localities.

Wool contracting is going on here. One clip of fine ewe wool has just sold at 21½ cents; this wool sold at 19 cents last season. As high as 22 cents has been offered for heavy, fine wools.

An Oregon sheepman recently sold 5,000 head of ewes, near Huntington, Oregon, at \$11.00 per head.

We have recently purchased from the Northern Pacific Railroad 5,600 acres of land. This land, however, we have been using under lease in other

years, but the railroad is now selling its land.

J. N. BURGESS, Oregon.

### CONTRACTING LAMBS AND EWES

In Idaho, around 50,000 February lambs have been contracted for delivery June 15th. Two or three bunches sold at \$4.87½ per head, but the price has moved up to \$5.00 per head, and only a few are available at that figure. Most growers are asking \$5.50 per head for early lambs, and one large outfit is holding at \$6.00 f. o. b. cars.

In Idaho, bred ewes are selling at from \$9.50 to \$10.50 per head, depending on quality and age. A few yearling ewes have sold at \$8.00 per head before shearing, and \$7.00 is the asking price after shearing.



We are breeding big, smooth bodied, heavy woolled, open faced Merino Rams. 700 yearlings for next season.

**L. U. SHEEP COMPANY**  
DICKIE, WYOMING

### RAMBOUILLETS Stud Rams - Range Rams

We have for sale 350 Yearling Rambouillet Rams. These rams are large, smooth, well covered with long staple wool, are raised at a high altitude and are very hardy. Our foundation Ewes are from the choicest American flocks.

**J. P. VAN HOUTEN CO.**  
Shoemaker, New Mexico

## M. K. PARSONS & COMPANY LIVE STOCK

1023 Kearns Building

Phone Wasatch 412

SALT LAKE CITY, UTAH

### MT. PLEASANT RAMBOUILLET FARM



Some of My Stud Rams.

My breeding is from the world's most noted flocks.

We offer for 1916-300 very choice yearling rams, large, smooth and fine woolled; also some ewes of the same type. We furnish rams for prominent breeders. For particulars call or write.

VISITORS WELCOME.

**JOHN K. MADSEN, Mt. Pleasant, Utah**

## Rambouillets



### Rams Ewes

We have for sale a large number of registered and unregistered Rambouillet Rams. Also a limited number of good ewes.

**W. D. CANDLAND**

Mt. Pleasant,

Utah

WOOL MUTTON

### RAMBOUILLETS



My Champion C. Type at San Francisco.

My Rambouillets are big and well covered with dense fleeces. I am breeding Rambouillets suited to give best returns on the range. Write me for prices on Registered Stud Rams or on Rams for Range Use. Will sell in lots from one to a carload.

**R. A. JACKSON,**  
DAYTON, WASHINGTON



**SHEARING PLANT FOR SALE**

14 machine Stewart plant with double grinder in perfect condition. Without power.

F. I. LONG, Great Falls, Montana.

**FOR SALE****The O. C. Ranch**

1334 Acres of Deeded Land, 3,600 Sheep, Horses, Cattle, Forest Reserve Grazing rights, Winter Range, a complete plant running in first-class shape.

Offered at a bargain. Write for particulars to STATE BANK OF DILLON, Dillon, Montana.

**SAVE YOUR LAMBS!**

One lamb will pay for a dozen copies of Total Per Cent Lambing Rules. Inexperienced help will save you 5 to 15 per cent more lambs when provided with these rules. Useful during other seasons of year.

Fifty Cents per copy, postpaid.

Address TOM BOYLAN,  
Rock River, Wyoming

**RANCH GRADED WOOL.**

Last year the National Wool Warehouse and Storage Company graded considerable quantities of western wool at the shearing sheds. We asked the Warehouse to give us a report on the way this wool had been received by the mills and that report follows:

"The opening in Boston of Western graded wool put up at the shearing sheds during the season 1915 made a distinctly favorable impression with manufacturers. We feel a substantial beginning has been made in our efforts to bring the growers and manufacturers closer together and more intelligent production and improved methods of preparation upon the part of the grower will receive recognition and possibly better return from the manufacturer. As a result of this understanding of each other's needs and requirements it seems probable there will come a better feeling all around.

"Among the first of the large Eastern manufacturers to show interest in the ranch graded wools was the Pacific Mills at Lawrence, Mass., producers of ladies' fine dress goods. This mill demands superior quality and condition of wool, as well as intelligent care and attention to its putting up and preparation for market. It uses almost ex-

clusively Australian wool for its choice productions.

"The first of the Western graded wool examined by this mill was a lot of approximately 200,000 pounds representing fine medium staple and half blood staple from the well known J. L. Sprinkle clip of Chinook, Mont. This wool had been carefully graded under our supervision at the shearing shed. The tags were removed but no further separation of parts of the fleece was made. The fleeces were carefully rolled without tying or use of strings, and put into the bales. The appearance and condition when opened in Boston and shown in comparison with other Montana wools of the same character, graded by us with the same care and attention, but tied and put up in sacks at the request of the owner, was distinctly in favor of the baled wool to the extent of almost eliminating interest in the examination of the latter.

"In discussion with Mr. Barron, the well known Boston buyer for the Pacific mills, after his purchase of the 200,000 pounds of the sprinkle wool, he spoke in high terms not only of the breeding and condition of the wool itself, but of the care in putting it up. The latter he stated unquestionably added not only to its appearance, but that mills as a rule could be depended upon to give more money for wools put up in honest, merchantable packages of this kind as against the old way of putting up wools.

"Further examination was made by Mr. Barron of a line of Wyoming fine staple wool put up under our supervision, of heavier shrinkage, which, however, showed less character in breeding with attendant lack of condition and quality. This wool was offered at 3 cents a pound less than the other line of similar grade. Mr. Barron took a sample shipment at our request and later reported that he was not interested in this lot, especially on account of the excessive amount of paint which had to be clipped off the wool before going into the scour. This he estimated cost fully  $\frac{1}{4}$  cent per pound for extra labor for sorting and clipping without mention of the injury to the parts

**Hot Docking Irons**

CUT YOUR LAMBS' TAILS WITH  
ELLENWOOD'S HOT IRON,  
ONCE TRIED ALWAYS USED

No loss of life, no loss of blood, and the lamb is not set back by docking. Write us and let us tell you what men say who have used them.

*Full Instructions Sent with Irons*

**ELLENWOOD & COMPANY, Red Bluff, California**

of the fleece from which the paint had to be clipped with hand shears.

"It was further stated by Mr. Barton that in his judgment the wool-grower had gone far enough in the matter of separating parts of the fleece as indicated in these particular lots of wool which he examined. He said the wool purchased would require no further sorting when arriving at their mill and would be suitable for blending with similar foreign wools if desired or could be handled upon its individual merits into the fabric.

"Along this line other well known mill buyers stated that it was their judgment that our ranch graded clips had been well put up to meet the average requirements of American mills and that if woolgrowers would put up their wools in honest, merchantable packages of this kind, following broad commercial grades as understood by U. S. manufacturers when handling domestic wool that the whole problem of buying and using territory wools by American mills, regardless of the class of fabrics produced, would be greatly simplified and would bring about better feeling and improved conditions all around."

#### THE BRADFORD WOOL EXCHANGE.

Consul Hamilton C. Claibourne,  
Bradford, England.

Every Monday and Thursday hundreds of members of the Bradford Exchange meet to buy and sell wool, to arrange the details of transportation and delivery, to contract for fabrics as well as raw materials, and to discuss the various exigencies of this industry. Groups of men gather on the corners and in the streets as often as on the floor of the Exchange. There are 2,250 subscribing members, consisting of wool merchants, top makers, combers, spinners, dyers, manufacturers, machine makers, and hundreds of business men from all parts of the world where wool is used or produced. Within a radius of 15 miles from Bradford are produced, in addition to every variety of woolen and worsted, great quantities of mohair, alpaca, cashmere,

cotton and silk fabrics, carpets, rugs, blankets, tapestries, plushes, and velvets.

According to a report of the local Chamber of Commerce the 600 square

miles adjacent to Bradford support a population of a million and a quarter inhabitants, more than one-half thereof being engaged in or dependent upon the wool and its kindred industries.

#### Mr. Sheepman

### The NEW GRAND Hotel

at the corner of Main and South 4th Street, has opened the finest club room in Salt Lake City, for the breeders in intermountain country. Call and inspect.

Pool, Billiards, Salesrooms and up-to-date luncheon at all hours and most reasonable prices.

### HOTEL UTAH

SALT LAKE CITY

ROOMS WITHOUT BATH  
\$1.50 and \$2.00 PER DAY  
WITH BATH \$2.50 and UP.

"The very best of everything at sensible prices"

## CULLEN HOTEL

SALT LAKE CITY, UTAH

FRED J. LEONARD, Mgr.

*Headquarters for Sheepmen*

More Sheep bought and sold in the Cullen Hotel than in any hotel in the United States.

Rates \$1.00 and up

E. A. CULBERTSON, President  
W. F. EARLS, Cashier

DeWITT KNOX, Vice-President  
GEORGE G. KNOX, Asst-Cashier

United States Depository

### The National Bank of the Republic

Salt Lake City, Utah

Capital	-	-	\$ 300,000.00
Surplus and Undivided Profits	-	-	340,865.00
Deposits	-	-	4,275,000.00

This bank enjoys the pleasure of having more woolgrowers as customers, than any bank in this Intermountain Country. A number of the most prominent attribute their success to the unfailing aid of this bank during good times and bad.

WE WANT YOUR BANK ACCOUNT



Leading Implement and Hardware Dealers

WOOL GROWERS SUPPLIES

At 50 Places in Utah and Idaho

Mention the National Wool Grower

ATTENTION WOOL GROWERS!

### SALTER BROS. & CO.

Wool Brokers

216 SUMMER STREET  
BOSTON, MASSACHUSETTS

Solicit wool shipments for direct sale to the mills. Always sold subject to shipper's consent. Liberal advances. Best of references.

**WM. B. HUGHES PRODUCE CO.**

Wholesale Dealers in

**WHEAT, OATS, BARLEY, CORN and HAY**  
Car Lots Only.

Office 219 Moose Club Bldg., SALT LAKE CITY, UTAH

**"PERFECT" Identification****FOR CATTLE, SHEEP, SWINE, ETC.**

There can never be any question about ownership, when an animal shows a "PERFECT" EAR TAG, with number of animal and name and address of owner stamped thereon. And any owner who neglects to so identify his stock, has no one to blame for losses except himself. The return of one good steer will pay for "Perfectly" tagging 2,000 head.



The "PERFECT" TAG should be used because it is the lightest tag manufactured; made of aluminum; non-corrosive and non-poisonous. It can be attached to an animal's ear instantaneously, in one operation. No danger of squeezing the ear or causing inflammation. This ear tag is endorsed by stockmen all over the United States. Send for FREE Sample Tag and Prices today.

**SALT LAKE STAMP CO.**  
67 W. Broadway Salt Lake City

# HEATH & MILLIGAN

## APPROVED SHEEP MARKING INK

THE UNIVERSITY OF WYOMING  
AGRICULTURAL COLLEGE  
AND EXPERIMENT  
STATION

January 30, 1915

Heath & Milligan,  
1833 Seward Street,  
Chicago, Illinois.

Gentlemen:

We have looked over the sheep which we have branded with your sheep marking ink. In every case so far the paint has stood the weather as well as our standard paint. We have also scoured up a sample of wool which had been saturated with your ink and then dried in the laboratory since October 19. It scoured out perfectly.

Very truly yours,

*J. A. Hill*  
Wool Specialist.

*When writing to advertisers please mention the National Wool Grower.*

Bradford is the commercial and distributing center for a network of neighboring manufacturing towns, all engaged in the sale or manufacture of textiles.

Inasmuch as four-fifths of Great Britain's wool manufactures are carried on in the West Riding of Yorkshire, a great bulk of this trade is ultimately transacted on the Bradford Exchange, where practically all vegetable and animal fibres known to the textile industry may be bought or sold.

**PLANS FOR DESTROYING COYOTES.**

In discussing the coyote question in Nevada the other day with W. N. McGill, he spoke as follows: "We have had a great deal of rabies in Nevada among coyotes and dogs. There has been some loss of cattle and hogs, but very few sheep have so far been affected. Many of our sheep dogs have been bitten by rabid coyotes and have had to be killed. I know of 40,000 sheep now in the feed lots around which there is not a single dog, all of them having been bitten by coyotes and having had to be killed.

"The Federal Government has a large force of hunters working in Nevada, and the state has turned over to them the work of exterminating the coyote. The State of Nevada has a emergency appropriation of about \$25,000.00 that is to be used in this coyote extermination, and the counties of Nevada have agreed to raise about \$70,000.00 more, making the total state funds available for coyotes destruction \$95,000.00. In order to have the work all under one head, the state and county money has been turned over to the Government to be expended under its direction."

**FROM NORTH****YAKIMA, WASHINGTON**

Enclosed please find \$5.00 to pay my dues to the National Wool Growers' Association and my subscription to the National Wool Grower. Every sheepman should be glad to support

the National Wool Grower for the good it does is inestimable and is money in all of our pockets.

We had a long, hard winter in this section of the country, but no losses of sheep although it cost a fortune to bring them through. Alfalfa hay in the stack is \$18.00; corn and other grain \$35.00 a ton. But the good feed is now showing in the wool and in the good shape of the ewes for lambing. We are strong on the Lincoln. Had some lambs sold on the Chicago market last week weighing 91 pounds and bringing the top, 11 cents per pound. These lambs were from a Rambouillet or Merino ewe and crossed with Lincoln rams. We were offered 32 cents for the wool off of these lambs.

A. W. COFFIN, Washington.

**FROM ONTARIO, CANADA.**

Now, on February 28th, we have just commenced lambing. All of our Lincolns and Cotswolds have been on feed here since November 20th and will be kept on feed until about May first. I wonder how a Western sheepman would like a feeding period this long. We have about 120 ram lambs that we will shear March first, and I think they will average about 16 pounds per head. Our sale rams we shall have ready to ship anytime after April first. If war conditions will permit, we shall import some Lincoln and Cotswold rams from England. We intend to offer a few good rams at the Salt Lake Ram Sale next September.

We are up against it here for farm labor. Nearly all the young men are enlisting and are going to the war, and no one knows how many more will have to go.

ERNEST ROBSON, Denfield, Can.

**PELTS CARRYING THE LOAD.**

While unprecedented prices have been paid for live muttons, and killers are protesting that they have sold the meat at a loss, the entire load has not been carried by mutton as pelts have commanded \$2.25@2.75 and pulled wool is high.

J. E. P.



## OLEOMARGARINE Swift & Co.

Oleomargarine has been misrepresented to the public to a greater extent than any other food product. It is pure, wholesome, digestible, and economical; it is manufactured from the choicest materials, in factories conducted under supervision of United States Government Inspectors, whose duty it is to see that factory and utensils are kept clean, processes of manufacture sanitary, and only suitable and wholesome materials used. These materials are oleo oil (pressed from choice beef fats), neutral, a somewhat similar product made from the leaf of the pig, a vegetable oil (cotton seed or peanut oil), and milk products, composing milk, cream, and sometimes butter, according to the grade of Oleomargarine produced.

From almost its first introduction in this country, the manufacture and sale of Oleomargarine has been seriously hampered by legislative restrictions, ostensibly to protect the public against fraud, but in reality to hamper its manufacture and sale as much as possible.

It has been widely advertised that further restrictive legislation against Oleomargarine will be attempted during the present Congress. The result

of such legislation would be to lower the value of every animal slaughtered in this country, as the choice fats used for Oleomargarine purposes would have a lower value for other uses; it would curtail the outlet for cotton seed and peanut oils, in which the southern sections of our country are so much interested, and it would further penalize those who desire to use Oleomargarine for economical or dietetic reasons.

There is no excuse for any Oleomargarine legislation except to insure its sale on its merits.

### AS A CALIFORNIAN SEES IT.

Your convention number just received and read with much interest.

Will now drop you a few lines in regard to the condition of the sheep in this part of the country. We are having very fine weather now. We had very fine weather until January 1st, then it snowed and blowed continuously until January 23rd. We had as much snow as is healthy for the sheep on desert range. It broke up with a chinook and took the snow off very slowly on the low country and it all soaked into the ground. Some sheep are being fed hay and everything looks for the best now.

Our sheep are in the Denio, Oregon,

country on the desert range and we hear all is well.

We are not having as much trouble with the coyotes this winter as last. Of course we have had the rabies for a year and a great many have died, also a great many have been killed.

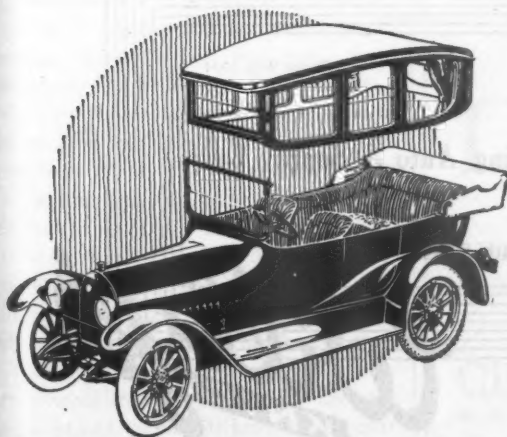
I have been in the sheep business continuously since the spring of 1877 and have always had from four to ten bands to attend the year through. If I can live a few years longer will be classed as one of the old sheep men. Was born in 1861. My wife has a first born on her knee so it looks like a fighting chance for twenty years more.

I want to be at the next convention. It will be my first offense.

Now about the coyotes and all

## ALL-YEAR KISSEL KAR

A PRACTICAL CAR FOR ALL SEASONS



Seven-Passenger, 6-cylinder complete, with summer and winter tops, \$2250.00, delivered; 5-passenger, 6-cylinder complete, with summer and winter tops, \$2150.00, delivered; 4-passenger, 6-cylinder complete, with summer and winter tops, \$2075.00, delivered.

Other Models including 4-cylinder, 5-passenger, Model 32, ranging in price from \$1150.00 to \$1750.00, delivered.

INTERMOUNTAIN  
MOTOR CAR COMPANY  
Abram Hatch, President.

"Service First."

Was. 2100. 434 So. Main.

## Whenever You Have Tire Trouble Refer to these Advantages of PENNSYLVANIA Oilproof VACUUM CUP TIRES

GUARANTEED not to skid on wet or greasy pavements, also returnable at full purchase price after reasonable trial.

GUARANTEED oilproof. V.C.'s save you money by eliminating oil rot and tread softening.

GUARANTEED for 6000 miles, with an average life nearer double that.

No other tires are sold on such a definitely satisfactory basis.

THE SALT LAKE  
HARDWARE CO.

WESTERN DISTRIBUTORS



predatory animals. It looks to me if we could get a uniform bounty in all the states interested from East to West and from North to South and make it a permanent affair, it would come nearer solving the question of keeping them to a minimum number. No one state would be giving a premium on crime as has been done. California in

the early '90s paid a \$5.00 bounty on coyotes and hunters shipped them in from Oregon, Nevada, Arizona and other places. The coyotes will get scarce by having the rabies and being hunted and killed. The rabies will die out as epidemics have done before but the extermination of the coyote will not be realized. The intermountain country is too rough and large for this to take place.

I read in The Wool Grower that Nevada was the slowest to contribute to the Association. There are a number of very well-to-do sheep men in that state and they could well afford to make a liberal donation every year and send their men on a still hunt for members, as there are great numbers of Basque sheep owners that do not read English very well, but would subscribe if it was explained to them. It is our duty to do these things at any and all times.

You say pay your dues. No one will pay them for you. This is not the case. All receive a benefit whether members or not. The church that does not pay its taxes gets the protection of the state just the same as the citizen that does pay.

We are going to start soliciting all sheep men here to pay their dues and join the Association right now.

Here is \$5.00 each for H. H. Fin-

mond and myself and Wm. T. Cockrell.

W. U. SCOTT, California.

### WHOLESALE SHEEP AND LAMB PRICES.

The following table gives the wholesale price of sheep and lambs on the Chicago market:

#### Lambs.

Good Caul Lambs	@16
Round Dressed Lambs	@18
Saddles, Caul	@18
R. D. Lamb Fores	@15½
Caul Lamb Fores	@14½
R. D. Lamb Saddles	@20
Lamb Fries, per lb	@20
Lamb Tongues, each	@ 4
Lamb Kidneys, per lb	@12

#### Mutton.

Medium Sheep	@13
Good Sheep	@14½
Medium Saddles	@14
Good Saddles	@16
Good Fores	@12
Medium Racks	@11
Mutton Legs	@15
Mutton Loins	@ 9
Mutton Stew	@ 8
Sheep Tongues, each	@ 2½
Sheep Heads, each	@10

We are waiting for the subscription that you promised to send in.

# Buick

## The Thinker

The buyer of a Valve-in-Head Buick Six is NOT a faddist. He is a thinker. He can NOT be "stampeded."

Men who will possess the upward of 66,000 Valve-in-Head Sixes long before the end of the 1916 season will have thought Six and Valve-in-Head months before they become owners. Their act of purchase is an outward manifestation of a conviction. A conviction based upon the two most vital of motor car essentials, POWER and SMOOTHNESS. Both are flexibility—efficiency—economy. Both are tried, tested and proven.

ASK FOR DEMONSTRATION. WE'LL BE DELIGHTED TO TAKE YOU FOR A "BUICK" RIDE—ANY TIME.

### RANDALL-DODD AUTO CO.

Auto Row Salt Lake Was. 4560

# Overland

Phone Was. 1934

### Browning Auto & Supply Co.

55 West 4th, South

# Willlys

KNIGHT

Sleeve-Valve Motor

## THE WOOL SITUATION IN LONDON.

From London Wool Record.

"Then the question of wool prices is a very important one. Every time the Government has come into the market to buy cloth since the beginning of November prices have steadily advanced and with the perfecting of the Derby scheme and the calling to the colors of many more men, it has not needed the wisdom of a Solomon to see that larger requirements were inevitable. The placing of large orders by the Government in December, and the recent asking for further tenders is all significant in its way, and the general confidence in the future and desire to have something to sell when the opportunity arises, has all tended to steadily advancing values, led especially by the American competition in Australia, New Zealand and South Africa. There is no doubt that the competition of our American friends has been a prime factor in forcing prices upward. It is all right railing at the Government, but they have to decide many difficult problems which the average woolman in this district has no knowledge of whatever. Everybody knows that if our American friends had been denied the privilege of buying wool in Australia and New Zealand, values would have been at least 6 cent below what the bulk of wools have sold at in the Colonies. This would have brought out the indignation of Colonial pastoralists, selling brokers and possibly the Government departments of Australia, to say nothing of America, consequently we say that Westminster is in a very difficult position. Our American friends have a right to a certain proportion of our raw products in view of the munitions she is supplying to this and Allied countries, but it is now a burning question as to whether the embargo should not be reimposed in Australia as it has been in New Zealand. The question also arises as to whether with all the American competition, there is not sufficient merino wool in sight to satisfy the requirements of Great Britain and her Allies, and the reader will see that the

## CITY COAL COMPANY

PHONE: WASATCH 420

KLEAN KOLE

J. W. OTTENSTEIN, Mgr.

277 SOUTH MAIN STREET

SALT LAKE CITY, UTAH

## Farmers and Stockgrowers Bank

SALT LAKE CITY, UTAH

Capital \$300,000.00

Surplus and Profits \$20,000.00

## NATIONAL CITY BANK

CAPITAL AND SURPLUS \$300,000

SALT LAKE CITY, UTAH

## The McIntyre Building

Salt Lake City, Utah

Is Headquarters for the  
NATIONAL and UTAH WOOL  
GROWERS' ASSOCIATIONS

The Most Modern Fire-proof Building in the City

OFFICES FOR RENT

EVERY WOOL GROWER NEEDS  
AN ATTRACTIVE LETTER HEAD

WE PRINT THE

# National Wool Grower

THAT IS A SAMPLE OF OUR WORK

We will furnish a nice half tone and get you up an attractive letter head and envelope. It will help your business.

FOR PARTICULARS WRITE THE

## CENTURY PRINTING COMPANY

W. G. ROMNEY. J. Q. RYAN.

CENTURY BLDG., 231-3-5 EDISON ST., SALT LAKE



War Trade Department and the War Office have to decide problems of no mean order.

"To charge the Government with being asleep in these days of stress and strain is entirely off the map, for in addition to the big quantities of orders placed last December for men's wear khaki, they placed in that month no less than 237 contracts, for hosiery goods, a clear proof that there is activity elsewhere in the textile trade. All this means a very large consumption of worsted yarns, and the fact of the same having to be spun from combed wool means a large amount of work for this district. There is no wonder at wool values advancing in face of such colossal orders as have been placed, and no doubt Pimlico would have been wisely advised if they had bought last September and October

further quantities of khaki serge for use by our troops during 1916."

#### WOOL BAG AND BURLAP SITUATION OF THE SPRING 1916

It is very important that you should fully realize this situation and get your wool bags as soon as possible to be sure you have them, for it is not a matter of price per bag this season, but whether they can be obtained or not. Wool bag companies this season have refused to accept orders for future deliveries, in fact some are not taking any orders at all, for they can not be filled. The reason of this trouble, is because the burlap is made from jute, and jute is raised in India, to be exact the burlap we get comes from Calcutta, India. And as you may know

it has to be shipped through the Indian Ocean, through the Red Sea, the Suez Canal, and the Mediterranean Sea, thence to the United States. As India belongs to Great Britain, the Allies have ordered millions and millions of yards of burlap to be used as sandbags for breast works, but the German submarines have sunk a number of these ships, so the supply of jute is practically exhausted for this season, so when any burlap does reach this country it is held at a premium for the insurance rate is so high on it while in transit. Several countries had orders of 50 million yards go down, so when you stop to realize just what this means, you can readily understand the present situation. It takes several months to get ships through ordinarily so you can see when we could get orders refilled, even if the jute was still plentiful in India.

C. J. MUSTION WOOL COMMISSION COMPANY, Kansas City.

#### THE LONDON WOOL OUT-LOOK.

H. DAWSON & CO., London.

The market which closes today has recorded further sensational developments and has reached a level of values for colonial wools exceeding anything within living memory. The most remarkable feature of it is that with the boom there is no excitement, and amazingly high and dangerous prices are being paid, yet with the fullest confidence. This general confidence in the situation is very striking, probably arises from the fact that consumers are not only full of orders which will absorb these purchases but are generally enjoying good margins of profit and can afford to pay advanced prices. Moreover, it becomes increasingly evident that the consumption of wool is proceeding at an unparalleled rate in this country. Besides this, there are several factors which have added strength to the situation. The enormous absorption of wools by neutral countries (especially U. S. A.), from South Africa, Australia and New Zealand, has undoubtedly

### COATES BROTHERS

#### WOOL COMMISSION MERCHANTS

##### PHILADELPHIA, PENN.

Solicit consignments and offer best facilities for the handling and sale of wool. Cash advances made on bills of lading.

### FARNSWORTH, STEVENSON & CO.

#### WOOL MERCHANTS

CONSIGNMENTS SOLICITED

116-122 FEDERAL STREET

BOSTON

ESTABLISHED 1863

### J. BATEMAN & CO.

Successors to Justice, Bateman & Co.

#### Wool Commission Merchants

122 South Front Street, PHILADELPHIA

Liberal Cash Advances on Consignments. Market Report on Request.

### SULPHUR

ALL GRADES—ANY QUANTITY  
FROM A BAG TO A CARLOAD

Z. C. M. I. Drug Store

### WOOL BAGS

We handle more Wool Bags than any dealer in the intermountain region.

### PAPER TWINE

"Reliance" Paper Fleece Twine has the greatest possible tensile and tying strength.

### SHEEP SHEARS

B. B. A. and 71 or  
Trades Union Shears

SOFT ARKANSAS and  
LILY WHITE OIL  
STONES



SALT LAKE CITY,  
UTAH

had a dominating effect on values, particularly in merinos, which the shortage in the supplies of the Australian fine wools has of course helped to accentuate. In fact, to this cause the present high values in merinos can only be attributed.

The feared losses of wool boats owing to submarines in the Mediterranean and German raiders in the Atlantic, also add to the existing uncertainty regarding supplies.

Owing to the shortage of tonnage, freights have seriously contributed to the high prices of the raw material when delivered at our shores. It is a pity that some alleviation cannot be found, if only in the diversion to home routes of those British ships which are plying between neutral countries.

The embargo on crossbred exports has now become effective, not only from London but from the colonies, and it is understood that the export of merinos is gradually being discouraged.

#### WOOL AT BELLE FOURCHE, SOUTH DAKOTA.

We had something over a million and a half pounds marketed through this point last year and present indications are that this will be swelled to two and one-half million pounds this coming year.

This increase is partly due to the fact that a number of winter feeders of ewes will shear them before marketing this spring. The high prices of this season have drawn more men into the business in this section also. The sheep are in excellent condition now and the abundance of feed and the excellent weather we have had thus far, practically insures a record breaking quality clip for this year.

COMMERCIAL CLUB OF BELLE  
FOURCHE.

#### NEVADA WOOL SELLING.

Probably sixty per cent of the total wool clip of Nevada has already been contracted on the sheeps' backs. There are several large clips in Nevada, and these were the first to be contracted.

## AYRES, BRIDGES & CO. *Wool Merchants*

200 SUMMER STREET BOSTON, MASS.

Western Agents—GODDING & CHADWICK CO.,  
310 Dooly Block, Salt Lake City, Utah P. O. Box No. 635, Albuquerque, New Mexico

Before Disposing of Your  
Wool, Phone or Write—

## COFFIN & GILLMORE *Wool Merchants*

PHILADELPHIA, : PA.

Large Handlers of Western Wools

Local Office, D. F. Walker Block,  
Salt Lake City, Utah

Phone, Wasatch 4570  
J. A. KEARNS, Agent

*When Writing to Advertisers Mention The National Wool Grower*

## Jeremiah Williams & Co.

# WOOL

Commission  
Merchants

481 Summer Street, Boston, Mass.

Western Office, McIntyre Building, Salt Lake City, Utah

# "RELIANCE"

## PAPER FLEECE TWINE

FOUR PLY ONE PLY

*IT'S STILL THE "BROWN" KIND*

Made from high grade unbleached KRAFT Paper. "K-R-A-F-T" Spells STRENGTH in the paper business and STRONGEST as applied to Paper Fleece Twines.

**Reliance One Ply** is not so pliable, but much stronger than four ply and  $1\frac{1}{4}$  cents per pound cheaper.

**Reliance Four Ply** is very soft and pliable, holds the knot well and has much more strength than any other four ply Twine on the market.

Reliance Paper twines resist grease and moisture better than any other makes, but are perfectly soluble under the process of wool scouring.

## You Buy These Goods for SERVICE, Not Looks!

### Packed for Shipment—

250 lengths  $8\frac{1}{2}$  ft. each to bunch. 10 bunches a package weighing 55 lbs., and containing 2500 pieces.

Four of these packages placed together in a burlap covered bale for shipping. Burlap bales contain 10,000 pieces and weigh about 220 lbs. each.

### Western Distributors—

BEMIS OMAHA BAG CO., Omaha, Nebr.

BEMIS BRO. BAG CO., San Francisco, Cal.

BEMIS BRO., BAG CO., Seattle, Wash.

Z. C. M. I., Salt Lake City, Utah

T. C. POWER & CO., Helena, Mont.

## SCHERMERHORN BROS. CO.

OMAHA, NEBR.

CHICAGO CLEVELAND ST. LOUIS KANSAS CITY

Practically all the Nevada wools so far sold have been the fine wool clips. The J. G. Taylor clip of Lovelock, Nevada, has sold at 21 cents; the Warren-Williams Estate's clip has sold at 21 cents; the W. T. Jenkins. at  $19\frac{3}{4}$  cents; and the clip of the Golconda Cattle Company, near Winnemucca, at 19 cents. We have not heard of any sale in the States of Nevada above 22 cents or of any sale below 19 cents, but as much as 30 cents has been asked for some of the crossbred clips in Nevada.

### SOME 1915 TRADE STATISTICS.

Six principal markets, Chicago, Kansas City, Omaha, St. Louis, St. Joseph and Sioux City, received 10,456,128 live muttons in 1915, against 12,476,713 the previous year, the decrease being 2,020,588, which ought to be convincing of acute shortage.

Chicago showed the largest deficiency, receipts for the year being 3,510,015, a decrease of 1,886,330, compared with the previous year, which was mainly in mature stock and feeders.

Omaha took second place, as usual, but was close up to Chicago, with 3,268,279, a gain of 104,390 over the previous year.

Kansas City received 1,814,683, a decrease of 187,359, compared with 1914.

St. Louis' score was 648,142, a loss of 100,112, compared with the previous year.

St. Joseph was the only market other than Omaha, to show a gain. It received 877,930, or 47,674 more than the previous year.

Sioux City's 1915 run was 337,079, or 66,848 less than in 1914.

Omaha's feeder output for the year was 1,066,542, against 966,633 the previous year, 1,468,018 in 1913, and 1,350,000 in 1912.

As Chicago did not send a single hoof to the country, the shortage in feeder output is evident. In September Omaha sent only 378,376 feeders to the country, against 503,689 two years previously and the October output was only 273,744 against 464,713 in 1913.



## GENERAL LIVESTOCK SITUATION.

By J. E. Poole.

To what extent current scarcity of sheep and lambs is responsible for the \$2 advance in hog values during January and February is open to conjecture. Certain it is that the phenomenal hog market of the present year would have been impossible had live muttons been on an old-time basis. Early in the winter packing season, packers were confident that they would be able to fill their cellars with \$6@6.50 hogs and for a time pork was actually cheap. But the chop-eating element of the populous East, having been unable to secure lamb went to the succulent pork chop with an energy that boosted prices irresistibly. Early in the winter packing season hogs were not worth more than \$4.50 in the far West, thousands reaching St. Paul, Omaha and Chicago from Montana and Idaho that cost that figure at home. In the cornbelt the country price dropped as low as \$5.50, but packers made an overplay and the rebound was emphatic. The fact that feeders east of the Missouri river were unable to put in the usual number of thin sheep and lambs last fall assuring light supplies of mutton and lamb all winter, was undoubtedly a bullish influence in the case of hogs. The American people are becoming a race of chop eaters and restaurant patrons rarely order steak.

During February hogs crawled steadily up to the \$9 mark and prediction that the trade would go to that basis in March received credence. Packingtown usually shoots wide of the mark in its market forecasts and this season it has scored much the same dismal failure as did Washington statisticians in doping out the corn crop, which they pictured as a bumper one, whereas, the reverse was the truth.

Something has been wrong with the cattle market all through the winter. Nobody appears competent to diagnose the case. Packingtown oracles insist that beef is hard to sell, but the



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clamor with which the packers bid for a fresh supply on every short run of cattle is calculated to discredit this contention. Certainly steer trade has been a laggard while a new pyrotechnical display has been staged in the sheep house each succeeding week and the hog market performance has been a continuous boom. Until the stock cattle outlet at Chicago was reopened packers enjoyed a bargain sale, but the moment stock cattle buyers were able to get into action the \$5.50@ grades of steers jumped anywhere from 75c to \$1.25 per cwt. Slaughter grades have not sold to the same advantage, however, and the spectacle has again been witnessed of feeders paying prices radically out of line with current quotations on fat cattle. As long as the finisher does this he is riding for a fall and usually gets it.

The stock cattle situation is easier everywhere. No trades were made either at the El Paso or the Wichita Kas., meetings. Something is expected to develop at Houston, Tex., where the Texas Cattle Raisers Association meets the third week in March, but so far as Kansas is concerned, cattle and grass owners have been far apart. Grass is held at \$8@8.50 per steer and to pay this amount for board, something must be deducted from the original cost of the steer. A conviction exists that stock cattle have been commanding too much money and that the grazier and feeder are not warranted in taking the same risk that has penalized them recently.

There will, however, be no cheap stock cattle, especially if grass is good and the corn crop comes along promisingly. Western cattle production has been steadily increasing and a hue and cry has been raised concerning overproduction, but what has happened recently in the hog market ought to be reassuring to growers. This country now has a population somewhat in excess of 100 million people, which is being annually augmented, and constantly increasing supplies of all kinds of meat will be required. Stock cattle values are destined to be revised in a downward direction but the process will not be drastic.

All over the West there has been a furore over breeding cattle and it shows no sign of subsidence. A premium on Herefords has resulted owing to a conviction that "whiteface" cattle are better adapted to Western conditions than Shorthorns or Angus. Extravagant prices have been paid recently. A South Dakota man endeavored early in February to purchase a thousand Hereford heifers down in Texas and the best bid he could secure was \$65 per head. Just how many cows and heifers have been absorbed by the Western country for breeding purposes during the past year will never be accurately known, but such purchases have been enormous and will be reflected in succeeding calf crop.

Great Britain and France are buying less canned and fresh beef, but increasing purchases of hog product, having discovered that it is the most economical meat for army rations. This is probably affecting the cattle market adversely but higher prices are predicted. All over the cornbelt winter cattle have been closely garnered and few finished bullocks are now showing up at the primary markets. At Missouri river points heavy steers are a novelty and even Chicago is getting but a few good ones. Ultimately the cattle market must follow the pace made by sheep and hogs.

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